

19971125.qrp v00_n920.qrs.971125

Date: Tue, 25 Nov 1997 19:16:14 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 920

QRP-L Digest 920

Topics covered in this issue include:

- 1) [31270] Winter SPRAT
by George Dobbs <g3rjv@gqrp.demon.co.uk>
- 2) [31271] Re: photosensitive pc boards
by "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
- 3) [31270] Re: [31242] Re: 40m realignment apparently put on 2001 WRC schedule :
(
by Doug Faunt N6TQS +1-510-655-8604 <faunt@netcom.com>
- 4) [31270] Re: Norcal paddles
by Terres Family <terresfm@ncia.net>
- 5) [31271] FALSE FOX ALERT
by Joe Gervais <vole@primenet.com>
- 6) [31272] FOX: Got him, but who's the other Fox?
by Roger Hightower <n7kt@dancris.com>
- 7) [31273] NW80/20
by Ed <edn4pk@VoyagerOnline.net>
- 8) [31270] SGC2020 draws 300 mA on rx!
by W7LS <w7ls@blarg.net>
- 9) [31271] Re: Moving 40 Meters
by kt3a@juno.com
- 10) [31272] My Brown Brothers Paddle!
by Mike Duke <K5xu@cris.com>
- 11) [31273] Re: First timer?
by kt3a@juno.com
- 12) [31274] anyone on 10M?
by Ryan <ryans@willinet.net>
- 13) [31270] WOW--FOXhunt just ended...
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 14) [31271] FOX: What a night!
by "Tim Ahrens" <tahrens@inetport.com>
- 15) [31272] Re: FOX:
by kt3a@juno.com
- 16) [31273] Gophers ate my radials!
by "Vernon A. Hatley" <vhatley@flash.net>
- 17) [31274] Fox
by Jerrydeen@aol.com
- 18) [31275] Re: FALSE FOX ALERT
by "Steve Hurst" <shurst@magiclink.com>

- 19) [31276] DX Tip
by gsurrency@juno.com (Gary Surrency)
- 20) [31276] RE: anyone on 10M?
by Kevin Muenzler <wb5rue@stic.net>
- 21) [31276] Blue Film for PCB's (was Re: photosensitive pc boards
by "Claton Cadmus" <aplitech@spacestar.net>
- 22) [31276] Scratches on powder-coated NC paddle base
by "David D. Meacham" <ddm@datatamers.com>
- 23) [31277] Thanksgiving TurkeyFox Announcement
by "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>
- 24) [31278] Stainless steel contacts and the NorCal Paddles
by dannyayers@juno.com (danny k ayers)
- 25) [31279] RE: Gophers ate my radials!
by Kevin Muenzler <wb5rue@stic.net>
- 26) [31280] Re: FOX *Tonight*
by Monte Stark <ku7y@sage.dri.edu>
- 27) [31281] FOX - *We're* Ready
by "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>
- 28) [31282] SST Coyote Killer -- One Easy Step
by "L.Svec,W.Burdick" <svecbrdk@well.com>
- 29) [31281] Re: Interesting phenomenon: vertical vs horizontal antenna
by Joe Gervais <vole@primenet.com>
- 30) [31281] Vert vs. Dipole (pt 2)
by "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>
- 31) [31281] Re: Gophers ate my radials!
by David Bixler <qrp@netins.net>
- 32) [31281] More fun facts and trivia!
by "Tim Ahrens" <tahrens@inetport.com>
- 33) [31282] 15 meter QSO's?
by Bill Todd <bill@techline.com>
- 34) [31283] RE: Vertical vs. Dipole
by Adrian Weiss <aweiss@sunflowr.usd.edu>
- 35) [31284] Re: QRP tip or 2
by "Frank A. West" <ke6vhm@earthlink.net>
- 36) [31285] Re: Vertical vs. Dipole
by "david's" <elim@ime.net>
- 37) [31286] FOX Log 11/25/97
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 38) [31287] Re: Gophers ate my radials!
by kt3a@juno.com
- 39) [31288] Ham exam-generating site, also does CW up to 50 wpm!
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
- 40) [31289] RE: FOX Log 11/25/97
by "Rattray, Bruce" <Rattray@siast.sk.ca>
- 41) [31289] Ade.....Thank you
by ab5uacw@juno.com (Clifton W Sikes)
- 42) [31290] Ideas for multiband rig
by Scottae4vq@aol.com

- 43) [31291] Pixie/40-9er Contest Rules
by Randy Hargenrader <randyh@harksystems.com>
- 44) [31292] QRP Clubs w/ QRP CALLS
by Randy Hargenrader <randyh@harksystems.com>
- 45) [31293] Re: Blue Film for PCB's (was Re: photosensitive pc boards
by Steven Weber <kd1jv@moose.ncia.net>
- 46) [31294] Pixie Contest/Individual QRP Calls
by Randy Hargenrader <randyh@harksystems.com>
- 47) [31295] Re: Gophers ate my radials!
by Monte Stark <ku7y@sage.dri.edu>
- 48) [31296] Rodents ate my linear!
by NilsBull@aol.com
- 49) [31297] Re: Stainless steel contacts and the NorCal Paddles
by Vic Rosenthal <rakefet@rakefet.com>
- 50) [31297] Re: Interesting phenomenon: vertical vs horizontal antenna experience
by "Ken Hanks" <kennfd@ibm.net>
- 51) [31298] Re: Norcal paddles
by Ed Loranger <we6w@qsl.net>
- 52) [31299] MFJ 1796 and 1621 antennas
by "CHARLES LESKIE" <CLESKIE@um-f1.umd.umich.edu>
- 53) [31300] Re: What a night!
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 54) [31301] Re: Norcal paddles
by bcutter@teal.csn.net (Bob Cutter)
- 55) [31302] HB: Another well-worn topic
by n5inz@juno.com (John M Andrews)
- 56) [31303] Re: Ideas for multiband rig
by "Bob Kellogg" <ae4ic@nr.infi.net>
- 57) [31304] Re: What a night!
by Ed Loranger <we6w@qsl.net>
- 58) [31305] 15 meter QSO's-update
by Bill Todd <bill@techline.com>
- 59) [31304] Re: Norcal paddles
by Ed Loranger <we6w@qsl.net>
- 60) [31304] Ade's post
by Monte Stark <ku7y@sage.dri.edu>
- 61) [31305] FS: Vibroplex Book
by Stanley Wilson <microres@crl.com>
- 62) [31306] K0EVZ Fox
by Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
- 63) [31306] Argosy ALC line & 5w limit function
by NilsBull@aol.com
- 64) [31307] Re[2]: 12 MHz xtal filters
by Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
- 65) [31308] Foxes, paddles, &c
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 66) [31309] What is a Fox hunt?
by KB9RPD@aol.com

- 67) [31309] Re: Interesting phenomenon: vertical vs horizontal antenna experience
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 68) [31309] Solar Summary 11-25/M1 flare
by Paul Harden <pharden@aoc.nrao.edu>
- 69) [31310] NorCal paddle polishing advice
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 70) [31311] Stainless Steel Contacts for NorCal Paddles
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 71) [31312] FOX: Ruminations
by n4js@pobox.com
- 72) [31313] Mysterious Jewelers Rouge
by "Steve Hurst" <shurst@magiclink.com>
- 73) [31314] Re: BUBBA Pics!
by Richard Powell <ripowell@mpna.com>
- 74) [31315] Norcal Paddle Magnets
by "Claton Cadmus" <aplitech@spacestar.net>
- 75) [31316] RS Headphones Nova 43 or 44?
by Steve Galchutt <n0tu@webaccess.net>
- 76) [31317] Next NORCAL Meeting: Hitchhiking?
by Ed Loranger <we6w@qsl.net>
- 77) [31318] Re: Rodents ate my linear!
by gsurrency@juno.com (Gary Surrency)
- 78) [31309] Milliwatt Journals Sold
by K5BDZ@aol.com
- 79) [31309] SGC SG-2020
by "Phillip S. Rutledge" <rut@mcrut.mv.com>
- 80) [31309] Re: I need a QRP-L Number
by Bill Howell <bhowell@mail.utexas.edu>
- 81) [31309] Now that sunspots are here again...
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
- 82) [31310] NorCal / K8FF Paddles
by "William F. Nicolson Jr" <n2wf@erols.com>
- 83) [31311] QRP Rig Light!!!
by wb8ygg@juno.com (Bradley S. Mitchell)
- 84) [31312] Re: Next NORCAL Meeting: Hitchhiking?
by Ed Loranger <we6w@qsl.net>
- 85) [31313] 10 meters
by mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
- 86) [31314] Re: Stainless Steel Contacts for NorCal Paddles
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 87) [31312] Re: Norcal Paddle Magnets
by Paul Harden <pharden@aoc.nrao.edu>
- 88) [31312] Re: Mysterious Jewelers Rouge
by "Robert P. Okas" <vintage@best.com>
- 89) [31312] Mysterious Jewelers Rouge
by "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
- 90) [31313] Super Gainer, built and working
by Steven Weber <kd1jv@moose.ncia.net>

- 91) [31314] GQ40 WORKS!
by n4js@pobox.com
- 92) [31315] Silver contacts available, again
by W7LS <w7ls@blarg.net>
- 93) [31313] Fox....
by "KA5T Larry Wise" <lewise@inetport.com>
- 94) [31314] RE: SGC2020 draws 300 mA on rx!
by gregoire@endor.com
- 95) [31313] on the receipt of the norcal paddle...
by Conway Yee <cyee@bidmc.harvard.edu>
- 96) [31314] RE: Gophers ate my radials!
by gregoire@endor.com
- 97) [31313] RE: MFJ 1796 and 1621 antennas
by "LLOYD DEEM" <WH6CDU@classic.msn.com>
- 98) [31314] NorCal Paddle Status, 2nd Run
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 99) [31315] Re: Mysterious Jewelers Rouge
by Bob Liesenfeld <wb0poq@visi.com>
- 100) [31316] FOX Log 11/25/97 Fix #1
by "W. D. Lindsey" <70511.3041@compuserve.com>
- 101) [31317] Re: NorCal paddle polishing advice
by Stanley Wilson <microres@crl.com>
- 102) [31318] Re: Solar Summary 11-25/M1 flare
by gsurrency@juno.com (Gary Surrency)
- 103) [31319] Powder Coated Base Polishing
by doug hauff <slmachco@fix.net>
- 104) [31320] Re: NorCal paddle polishing advice
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 105) [31321] Re: Fox....
by ka3eaj@juno.com (Dave Lichtenwalner)
- 106) [31322] WARNING! NorCal Magnets WARNING!
by doug hauff <slmachco@fix.net>
- 107) [31323] Re: Mysterious Jewelers Rouge
by "Phillip S. Rutledge" <rut@mcrut.mv.com>
- 108) [31324] Re:SGC SG-2020
by Tim Ahrens <tahrens@inetport.com>
- 109) [31325] Re: NorCal paddle polishing advice
by bcutter@teal.csn.net (Bob Cutter)
- 110) [31326] Re: Mysterious Jewelers Rouge
by Jeff Grudin <grudin@pacific.vdbs.com>
- 111) [31327] Low Frequency Radio
by "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
- 112) [31328] 2SC1947
by "Arjen Raateland, FEI/Impacts Research" <Arjen.Raateland@vyh.fi>
- 113) [31329] South Africa on 17M
by "Jim Kortge, K8IQY" <jokortge@mci2000.com>
- 114) [31327] The Exam
by Brad Mugleston <bmug@gwl.com>

Date: Mon, 24 Nov 1997 00:19:51 -0000
From: George Dobbs <g3rjv@gqrp.demon.co.uk>
To: QRP-L@Lehigh.EDU
Subject: [31270] Winter SPRAT
Message-ID: <01bcf86e\$aef34200\$LocalHost@kcubkvq1>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

TRIBUTE TO W1FB
CHRISTMAS PROJECT
TRANSMITTER KEY
THE MAIDENHEAD PIXIE
WEATHERPROOFED PL259
BALANCED DC RECEIVER
CW FOR EP2 [TWO METHODS]
ANTENNA MOUNT
LED SWR BRIDGE
THE MISERS DREAM
EXTRA AUDIO FOR LCK
GQ2000 Pt.4
MAKE A BOX
AF SPEECH PROCESSOR

The Contents list for the Winter SPRAT
Issue 93
Ready - almost - for the printer
Due out at the end of December
to all G QRP Club members.
Details of the club - and a back issue of SPRAT
available if you send you full postal address

George Dobbs	G3RJV	"It is vain to do with more
g3rjv@gqrp.demon.co.uk		what can be done with less"
The G QRP Club		William of Occum

Date: Tue, 25 Nov 1997 08:27:57 +0800
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
To: aplitech@spacestar.net
Cc: qrp@pandora.lugs.org.sg

Subject: [31271] Re: photosensitive pc boards
Message-ID: <347a1b90.pandora@pandora.lugs.org.sg>

On Mon, 24 Nov 1997 10:58:42 -0600, "Claton Cadmus" <aplitech@spacestar.net> wrote:

> | I am trying to make a pcb. I want to use a transparency made
> | on a xerox machine or laser printer as the photopositive
> | mask. My question is, will the dark areas of the transparency
> | made in this way be opaque enough to use with the sensitized
> | board, or will the light bleed through and ruin everything?
>
> I have tried this and find it doesn't work well. I have a friend in the
> printing business so I send the "copy" to him and he returns a proper
> positive film. This works great of course.

Actually, you may want to experiment with different exposure times. I have tried with photocopied masks and as long as I don't expose it for too long, or use too intense a UV source, they work fine. In fact, they work quite well. Of course, you'll want to have a decent photocopier that does a good job with the reproduction in the first place.

73 de 9V1ZV Daniel

--
+-----+-----+
Daniel Wee	daniel@pandora.lugs.org.sg
9V1ZV	
QRP-L #667	9V1ZV@amsat.org
+-----+-----+

Date: Mon, 24 Nov 1997 17:00:52 -0800 (PST)
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@netcom.com>
To: mgipe@reliablemeters.com
Cc: ku7y@sage.dri.edu, qrp-l@Lehigh.EDU
Subject: [31270] Re: [31242] Re: 40m realignment apparently put on 2001 WRC schedule :(
Message-ID: <199711250100.RAA02386@netcom10.netcom.com>

And keep in mind that this would be a WORLD-WIDE realignment. Our overseas colleagues would have 200kHz more than they have now.

Many boatanchors can do this change easily. Others won't cover the whole new band, just as they don't cover the WARC bands now.

73, doug

Date: Mon, 24 Nov 1997 21:01:51 -0800
From: Terres Family <terresfm@ncia.net>
To: qrp-l list <qrp-l@Lehigh.EDU>
Subject: [31270] Re: Norcal paddles
Message-ID: <347A5BBF.6B6D@ncia.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

My experience is very similar, especially the chain saw massacre part!
Please let me know or post to the list if you get a good answer to your
polishing questions. Maybe if the brass arms were reversible (might not
be as pretty) then you could chose narrow or wide.
One end of my magnet is flat and square but the other end is partly
rounded and not square. Any body else get that? Did it matter? Any body
try grinding the odd end flat?
tnx
72 de Jerry AA10F

Date: Mon, 24 Nov 1997 18:02:44 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-l@Lehigh.EDU
Subject: [31271] FALSE FOX ALERT
Message-ID: <199711250102.SAA10155@usr07.primenet.com>

Howdy Folks,

First off don't get mad, it was an honest mistake by
a fellow QRPer. If you worked a Fox tonight and he was
NOT Doc K0EVZ, get back on the air ASAP and find him!

I had just worked Fox Doc (great ears Doc, thanks!)
and was trolling for a QRP QSO (fix that pathetic fist
of mine...) and heard "QRZ? FOX". Hmmm. Honest 599 sig.
Too strong for Doc, ain't it? Well prop is a weird thing.
Let's listen in, I thought to myself.

He caught someone.... sent the RST, state is CA, name is...
Uh oh. Heard him work two more folks. I *had* to be sure
or I was gonna look like a real weasel. Yep, I was sure.

Called him. He gave me his info, gave him mine (well ya never can be too safe.... ;-)), and then asked if he was the scheduled Fox tonight (knowing the answer in advance).

You guessed it. He thought it was a regular contest. He knew all about Doc, even bagged him I think, but didn't realize how the Fox hunt works. I explained as gently as I could without sounding like a Band Cop, and had a short chat with him.

So there ya have it - with the Fox, just like the immortals from Highlander, there can be only one. ;-) Hope I got this message out in time to help some would-be Fox catchers.

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"It happens sometimes. People just explode. Natural causes." -Repo Man

Date: Mon, 24 Nov 1997 18:09:53 +0000
From: Roger Hightower <n7kt@dancris.com>
To: qrp-l@Lehigh.EDU
Subject: [31272] FOX: Got him, but who's the other Fox?
Message-ID: <3479C2F1.F6AFCBB0@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Wandered into the shack just abt 0030 and checked the Fox time. Cranked up the OHR-400 and listened, there was N6ZS calling CQ Fox....giving an exchange of CA GEORGE NR 5W. Who the heck was he?

Up a bit, and heard Doc calling, so punched the callsign in. There he is....gave me a 549. Doc was anywhere from 579 to 539, but I caught him in the middle. Nice work, Doc.

I still wonder who that other dude was, and why he was calling CQ Fox.

--

72/73, de Roger, N7KT
AK-QRP 167, ARCI 8946, CQC 176, GQRP 9081, NE-QRP 383, NORCAL 1099,
QRP-L 62

Date: Mon, 24 Nov 1997 21:13:32 -0800
From: Ed <edn4pk@VoyagerOnline.net>
To: qrp-1@Lehigh.EDU
Subject: [31273] NW80/20
Message-ID: <347A5E7C.2D52@VoyagerOnline.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

What are or are there any differences between the kit from Emtech or the one from Dan's ?? Anyone know for sure ??
Thanks..73..Ed N4PK qrp-1#1307

Date: Mon, 24 Nov 1997 17:33:48 -0800
From: W7LS <w7ls@blarg.net>
To: qrp-1@Lehigh.EDU
Subject: [31270] SGC2020 draws 300 mA on rx!
Message-ID: <347A2AFC.5911@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Anyone notice the upgraded current draw on receive? I thought it used to be down around 200 or less.

Man, my favorite rig draws over three times less current ON TRANSMIT! (Yea-Pixie!) :-)

With all that current drain, it's pushing the 2020 up into the 'also-ran' area. It is distinctive in that it is more ruggedly built than most other rigs. That's a plus. I got rid of a HW-9 a long time back, when I noted that it drew something like a quarter of an amp on receive. Not very desirable for a battery powered station. Nice rig, otherwise.

Jim W7LS

Date: Mon, 24 Nov 1997 20:20:02 EST
From: kt3a@juno.com
To: ku7y@sage.dri.edu

Cc: qrp-1@Lehigh.EDU
Subject: [31271] Re: Moving 40 Meters
Message-ID: <19971124.201814.5415.5.kt3a@juno.com>

Wow, I used to have the ole classic Ft-101-EE too!
They can go out to other bands if you crystal them
up for it. I wish I never got rid of it, mine was mint.

I hate to burst Doug's bubble, but the MARS operators
are already "outside" the 40m band. Most of the rice
boxes will go there with little modification.

USAF MARS AFA1FK/AGA1FI
Cameron C.R. Bailey <><
Amateur Radio, KT3A
kt3a@juno.com
Mount Wolf, Pennsylvania

Date: Mon, 24 Nov 1997 20:29:57 -0500 (EST)
From: Mike Duke <K5xu@cris.com>
To: David Gauding <david.gauding@bbs.galilei.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31272] My Brown Brothers Paddle!
Message-ID: <Pine.SUN.3.96.971124202257.23372B-100000@viking.cris.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Thanks to everyone, especially Dave, for the Brown Brothers history.

Dave, your message is a keeper!

I bought my BLT-A, new, in 1978, for \$29.95. Played with one at a fest,
and was hooked. Later, saw the paddle/key combo in a flea market.
Shoulda got it!

The only thing that I did to mine was put a slightly better pair of rubber
feet on the paddle end. They grab my desk better than the originals.

Thanks again for some nice reading.

For the curious, this paddle and an MFJ keyer work well with my 30 meter
OHR-100.

72/73
Mike

AMATEUR RADIO STATION K 5 X U
Jackson, Mississippi

Date: Mon, 24 Nov 1997 20:20:03 EST
From: kt3a@juno.com
To: JCORDILL@cerner.com
Cc: qrp-1@Lehigh.EDU
Subject: [31273] Re: First timer?
Message-ID: <19971124.201815.5415.6.kt3a@juno.com>

Jim,
We welcome you! Be aware of a solar storm brewing.
The "A" index was up around 47! It could be HF blackout.
So, if running QRP tonight does not work, blame it on the sun!
PS, I respect the OTs and 00Ts.

Cameron C.R. Bailey <><
Amateur Radio, KT3A
kt3a@juno.com
Mount Wolf, Pennsylvania

On Mon, 24 Nov 1997 14:12:45 -0600 "Cordill,Jim" <JCORDILL@cerner.com>
writes:
>Gang;
>
> Go easy on a first timer, I just read about this group in the DEC
>QST. I'm going to give it
> a try tonight. I've turned down the power on the rice box to 4
>watts.
>Can any of you OT'ers
> give a guy a tip or two? It (hf fox hunts) sounds like a good way to
>brush up on the old CW skills, I've been looking for a good reason to
>start again. Thanks,
>
> Jim KI0BK Olathe, KS
> PS: I been a ham for 20 years but I've never seen "72" used before.
>Must be a qrp thing. q:-)
>
>
>

Date: Mon, 24 Nov 1997 19:47:09 -0700
From: Ryan <ryans@willinet.net>
To: qrp-l@Lehigh.EDU
Subject: [31274] anyone on 10M?
Message-ID: <3.0.3.32.19971124194709.007f58b0@mail.willinet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Is there any QRP activity on 10M? When that band opens up, it OPENS up! I think you can work a long distance with very little power. I'm thinking about this because you can get 10M transceivers very inexpensively for the 10M band, and I'd like to get one, but not if there is no one to work there. They are small and rugged. For \$129 you can get a Euro 3900 from <http://www.copper.com>. Anyone had any experience with this radio? I have not. But I see it has all modes, and looks nice. Wouldn't be too hard to power, either. And antennas are small (er) for 10M. Most CB antennas can be modified for 10M. There are many other 10M rigs available, many CB's can be modified for this band. So, is there any activity up here? Thanks.

While I'm at the mic, maybe someone can help me with a problem. I put up a 120 foot dipole yesterday, and it doesn't receive worth a darn. What could I have done wrong? I'm new. I have a tuner. Of course I don't know how to work it.... Thanks a lot for any help.

And I'd also like to thank everyone for the warm welcome to this mailing list. First class operators. :)

Ryan
BK0TKZ

Date: Mon, 24 Nov 1997 21:35:05 -0500
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>
Subject: [31270] WOW--FOXhunt just ended...
Message-ID: <199711242138_MC2-2980-76B8@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Gang:

Well, my first-ever FOXhunt just ended. Wow! Very different from being a hunter. A quick thanks to all who were in the hunt. Doubtless some could not get through, and I wish it could be otherwise.

I plan to post the log within 24 hours. There will be some incomplete info...so please send your corrections ASAP.

Will also post some reflections at that time. But I can already say that it seemed to me that everyone did their best to compete without stepping on others. Thanks one and all for courteous, excellent operating. You brought credit to our hobby and to FOXhunting in general.

72/73,

--Doc/K0EVZ qrp-1 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL WAS 48/40
DXCC 56/42 <>< FOX Total 11/23/97 13 of 16. FOX 11/25/97.

Icom 751A Omni V Sierra Argo 515 Norcal 40a SW-40 49er
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom
SLV/W6MMA G5RV Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Mon, 24 Nov 1997 20:38:10 -0600
From: "Tim Ahrens" <tahrens@inetport.com>
To: <qrp-1@Lehigh.EDU>
Subject: [31271] FOX: What a night!
Message-ID: <199711250240.UAA08653@admin.inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Wow, what a lot of junk on the band tonight! Tried early (I think I stepped on somebody too, sorry)! Anyhow, the packet crud was in full force. Then had to head out to the Home Despot to get some finishing stuff for the project of life (no, not the paddles, the master bathroom)!!!

Got back about 0145 & heard Doc, about 30 Hz away from a couple of loooooonng winded guys... since the hardware wouldn't do it, the old noodle did a pretty good job, at least when Doc was louder than they were!

Hey Jess - that's cutting it kinda close, no?!

thanks all

Tim W5FN

Date: Mon, 24 Nov 1997 21:01:24 EST
From: kt3a@juno.com
To: n7kt@dancris.com
Cc: qrp-1@Lehigh.EDU
Subject: [31272] Re: FOX:
Message-ID: <19971124.205902.5415.7.kt3a@juno.com>

Not hearing fox or hounds here in the east.

Cameron C.R. Bailey <><
Amateur Radio, KT3A
kt3a@juno.com
Mount Wolf, Pennsylvania

Date: Mon, 24 Nov 1997 20:37:18 -0600
From: "Vernon A. Hatley" <vhatley@flash.net>
To: qrp-1@Lehigh.EDU
Subject: [31273] Gophers ate my radials!
Message-ID: <3.0.5.32.19971124203718.00799100@pop.flash.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

First, I'll have to say I've had much better luck with a Butternut vertical than any dipole. I worked 34 FOXes last year; all from a ground mounted 6 band Butternut; some I could not hear on a dipole, but they were there on the Butternut. Why? I have no idea. But that's not what this note is about. After being up for about two years, I have found out I have no radials left. Gophers have chewed them to pieces; not one was found over 18 inches long. Not only that they had chewed into my feed coax; water had soaked in and bingo the SWR went wacko. What to do? I've trapped gophers till I'm sick of it. I've poisoned them. They keep coming back. The coax feed line could be put in plastic pipe; but what about all those radials. Counterpoise instead of radials? If someone out there has had experience; good or bad; with a Butternut using a counterpoise instead of radials, I'd like to hear from you. I really don't have many more ideas

let to try.

--

KK5RO
Vernon A. Hatley
Shawnee, OK

Date: Mon, 24 Nov 1997 21:38:16 -0500 (EST)
From: Jerrydeen@aol.com
To: qrp-1@Lehigh.EDU
Subject: [31274] Fox
Message-ID: <971124213816_1205506102@mrin83.mail.aol.com>

Thanks Doc for digging me out. Your signal came up briefly to 599 and then faded after the contact at rst339. Is this fun or what??:-)) Still more fun for me than DX. I am having a ball!! I spend much more time on HF than I did for a while, thanks to the fox and other qrp stuff.

72 Jerry WB0T

Date: Mon, 24 Nov 1997 19:45:03 -0700
From: "Steve Hurst" <shurst@magiclink.com>
To: <vole@primenet.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31275] Re: FALSE FOX ALERT
Message-ID: <199711250243.VAA108418@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Joe,

Yes, I worked that station too ! I knew that Doc was the *real* fox, but thought.... Hmmmm , maybe there are two fox'es on tonight ??? Worked him just to be safe. Knew something was up when he gave me "nr 5 W"....

But was fun to work him anyway , BIG 5 w signal here in Idaho, S-9 on the TS-430s ! After we signed I stuck around and listened to you work him. Looked around the band and found the *real* fox, Doc. Not as strong as the other guy. Tried and tried but to no avail, my ears were burning and ringing from all the QRN/QRM ! I think that Doc almost heard me though, he tried to pull me out once. Had fun anyway, always nice to work you qrp guys on the air, heard lots of ya work Doc. Must have a better ant than I do (just wait til next yr. ye crafty foxii.... hehehehe) . Anyway take care

all and remember, its only a hobby !!!!!

73,

Steve Hurst

KA7NOC (southern Idaho)

<http://www.magiclink.com/web/shurst>

shurst@magiclink.com

>

> First off don't get mad, it was an honest mistake by
> a fellow QRPer. If you worked a Fox tonight and he was
> *NOT* Doc K0EVZ, get back on the air ASAP and find him!

>

>

> Cheers de AB7TT,

>

> -Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

>

> "It happens sometimes. People just explode. Natural causes." -Repo Man

>

Date: Tue, 25 Nov 1997 07:41:02 -0700

From: gsurrency@juno.com (Gary Surrency)

To: qrp-1@Lehigh.EDU

Subject: [31276] DX Tip

Message-ID: <19971125.074149.10222.1.gsurrency@juno.com>

ZF2RV, Ron, is on 7002 khz and he's 599 here. Just worked him with my
TAC-1 @ 5 watts at 0237Z. Give him a try if you hear him, he has a good
signal and good ears.

72,

AB7MY

Gary Surrency

Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions, ARRL VE

Date: Mon, 24 Nov 1997 21:07:02 -0600

From: Kevin Muenzler <wb5rue@stic.net>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, "'ryans@willinet.net'"
<ryans@willinet.net>

Subject: [31276] RE: anyone on 10M?
Message-ID: <01BCF91C.E9DB5FC0@SA5399-5-01.stic.net>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

On ryans@willinet.net, Ryan[SMTP:ryans@willinet.net] wrote:
> Is there any QRP activity on 10M? When that band opens up, it
> OPENS up! I think you can work a long distance with very little
> power. I'm thinking about this because you can get 10M transeivers
> very inexpensively for the 10M band, and I'd like to get one,
> but not if there is no one to work there. They are small and rugged.
<snip>
> Ryan
> BK0TKZ
>
>

You better believe it! There's lots of activity when the band opens up. I think it will be pretty well closed most of the time until next Summer. But the sun is waking up and it will be more and more active. It is a very quiet band, little or no man-made noise there so it doesn't take much power to talk around the world. I remember back in 1990 working eastern Europe using 25 watts CW and getting 589 and 599+20 reports. At the time that was the only part of the world that I could hear! Ten is strange about that some times. I've heard it open when all you could hear was New Zealand and nothing else, or Alaska and nothing else or Oklahoma and nothing else (I'm in south Texas).

Be patient! Ten is about to awaken like a lion!

72/73
Kevin, WB5RUE
wb5rue@stic.net

Date: Mon, 24 Nov 1997 20:40:54 -0600
From: "Claton Cadmus" <aplitech@spacestar.net>
To: <daniel@pandora.lugs.org.sg>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31276] Blue Film for PCB's (was Re: photosensitive pc boards
Message-ID: <199711250404.WAA05622@webster.spacestar.net>
MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Daniel,

I most certainly may not have found the right combination, but I have tried several different copiers and the best I've been able to do is serviceable PCBs.

I do need to get some of the "blue film" to try, I'd told that works very well. Anybody know where to get it?

| Actually, you may want to experiment with different exposure times. I have
| tried with photocopied masks and as long as I don't expose it for too long,
| or use too intense a UV source, they work fine. In fact, they work quite
| well. Of course, you'll want to have a decent photocopier that does a good
| job with the reproduction in the first place.

73 de KA0GKC Claton Cadmus
E-mail cla@spacestar.net
If you live in Minnesota check out this webpage!
<http://www.qsl.net/mnqrp>

Date: Mon, 24 Nov 1997 21:32:03 -0800 (PST)
From: "David D. Meacham" <ddm@datatamers.com>
To: qrp-1@Lehigh.EDU
Subject: [31276] Scratches on powder-coated NC paddle base
Message-ID: <Pine.LNX.3.91.971124212641.16273A-100000@dt1.datatamers.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,
Received my red, powder-coated base for the NorCal paddles a few days ago and I was disappointed to find areas of many fine scratches in the surface. Has anyone else had this experience? Is there a safe way to polish out the scratches?
72, Dave, W6EMD

Date: Tue, 25 Nov 1997 04:13:25 -0500
From: "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>
To: qrp-1@Lehigh.EDU
Subject: [31277] Thanksgiving TurkeyFox Announcement
Message-ID: <3.0.16.19971125041243.226fe2f0@som-uky.campus.mci.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

KA8OKH will be the qrp-1 Fox this coming Thursday, Nov. 27,
0100-0300 utc. That is Wednesday night, pilgrims. Freq will
be 7038 and/or 7042 +- qwerf.

I will be using 4 watts to phased 40m verticals. Will use every
means at my disposal to hear you - qrn squashers, narrow filters,
rit, you name it. The band is going very long on me after 0000 ut,
but sort of bounces back short around 0100 for a bit... we'll see. I
heard Europe this evening at the start of Doc's Fox run. Should be
a lot of fun.

I encourage those of you who have not yet tried the qrp-1 Foxhunt
to join us! You'll need a qrp-1 number issued from the Internet
Qrp Club website -

<http://www.users.zetnet.co.uk/clivew/>

The rules, schedule, and scores can be found on Bob's site -

<http://www.dancris.com/~ki7mn/>

So release the houndzzz! See you Wednesday night.

Happy Thanksgiving everyone...Rich, KA8OKH

Date: Mon, 24 Nov 1997 23:06:47 EST
From: dannyayers@juno.com (danny k ayers)
To: qrp-1@Lehigh.EDU
Subject: [31278] Stainless steel contacts and the NorCal Paddles
Message-ID: <19971124.220932.10207.2.dannyayers@juno.com>

Hello All,

Well, my curiosity has finally gotten the better of me. As I paint and repaint and repaint my NorCal paddle base (on the third, and I hope final, try), I keep pondering a post a few months back concerning the use of stainless steel for contact material.

As I recall, the thread created quite a run on silver (contacts of course). But I wonder if this was the first public post related to the now famous NorCal paddles. Sorry for the BW, but I just had to ask... must be all the paint fumes :-)

72,
Danny -WX4P
Huntsville, AL

Date: Mon, 24 Nov 1997 22:27:14 -0600
From: Kevin Muenzler <wb5rue@stic.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, "'vhatley@flash.net'"
<vhatley@flash.net>
Subject: [31279] RE: Gophers ate my radials!
Message-ID: <01BCF928.1E57A640@SA5399-4-12.stic.net>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

On vhatley@flash.net, Vernon A. Hatley[SMTP:vhatley@flash.net] wrote:
> First, I'll have to say I've had much better luck with a Butternut
> vertical than any dipole. I worked 34 FOXes last year; all from a ground
> mounted 6 band Butternut; some I could not hear on a dipole, but they were
> there on the Butternut. Why? I have no idea. But that's not what this
> note is about. After being up for about two years, I have found out I have
> no radials left. Gophers have chewed them to pieces; not one was found
> over 18 inches long. Not only that they had chewed into my feed coax;
> water had soaked in and bingo the SWR went wacko. What to do? I've
> trapped gophers till I'm sick of it. I've poisoned them. They keep coming
> back. The coax feed line could be put in plastic pipe; but what about all
> those radials. Counterpoise instead of radials? If someone out there has
> had experience; good or bad; with a Butternut using a counterpoise instead
> of radials, I'd like to hear from you. I really don't have many more ideas
> let to try.
>
> --
> KK5RO
> Vernon A. Hatley
> Shawnee, OK
>

>

Use bare aluminum radials. I have gophers too. I was using insulated copper and bare copper. They just ate right through it. For some reason they left the aluminum alone.

Kevin, WB5RUE

Date: Mon, 24 Nov 1997 19:42:23 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: 70511.3041@compuserve.com
Cc: QRP-L <qrp-l@Lehigh.EDU>
Subject: [31280] Re: FOX *Tonight*
Message-ID: <347A491F.450D@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Doc,

Well, I left work 1/2 hour early to get home and give it a try. But when I got into the shack it was 0135z and there was no Fox to be found. Band must have already gone long.

Oh well, you were lucky this time.....watch out the next time! :-)

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829-----NorCal #330-----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Tue, 25 Nov 1997 04:48:40 -0500
From: "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>
To: qrp-l@Lehigh.EDU
Subject: [31281] FOX - *We're* Ready
Message-ID: <3.0.16.19971125044832.26d7f574@som-uky.campus.mci.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Interesting discussion regarding vertical vs. dipole... my experience here is textbook - when I was using one 1/4 wave vertical, it always out-performed the 40m dipole at 30 ft, as far as dx was concerned. The dipole was always great for high angle, short one hop skip. Occasionally dx signals on the dipole would beat out the vert, but it never lasted that long. Just my observation.

Broke my foot on Saturday, so this fox will not be running too fast. I'll be at the operating position, cup of hot chocolate to the left of me, my Heathkit green NorCal paddle to the right, crutches leaning against the desk behind me. "Bean", my golden retriever (6 mos old) will be at his favorite Fox operating position... sitting in his desk chair beside me, cocking his head and staring intently every time the paddle starts clacking... I call it his "master's voice" stare. He'll glance at the paddle, then at me. He'll be there the entire 2 hours... he's done it before... what a pal.

Now if I can get him to tell time and log...

...Rich

Rich Dailey, KA8OKH <ka8okh@som-uky.campus.mci.net>
The KA8OKH / KB4NPI Web - <http://www.qsl.net/ka8okh>

Date: Mon, 24 Nov 1997 20:59:36 -0800
From: "L.Svec,W.Burdick" <svecbrdk@well.com>
To: qrp-l@Lehigh.EDU
Cc: ddm@datatamers.com, qrpbob@datatamers.com, adams@chuck.dallas.sgi.com, ki6ds@telis.org, wager@juno.com, erics@cruzio.com
Subject: [31282] SST Coyote Killer -- One Easy Step
Message-ID: <v03102804b0a00832d784@[206.169.228.169]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

A long, long time ago (well, about five months) someone on the list suggested that the cure for the SST's "howl" problem was to put an electrolytic cap between pin 7 of the LM386 and ground. He was right! Normally you don't need a cap here if you run the '386 from a regulated supply, which is why I left it out. But it turns out that the LED-based AGC circuit I'm using creates enough of a feedback loop that in some cases it causes trouble. The pin 7 bypass cleans it up.

Other suggested solutions took two or more parts, so this single cap method was the one I preferred. After all, I'm genetically programmed to try to keep parts count low :) and there ain't much room left on the SST's PC board.

I never could duplicate the problem at my QTH, so I enlisted the help of several SST owners to try this, and the results are in: we're three-for-three. Even 1uF will do it, but I already use a 2.2uF cap elsewhere in the rig, so 2.2 it is. Safety margin doesn't hurt.

So, if you still have a coyote in SST's clothing, kill that critter now with a "2.2" gauge. You can use any cap with a 10V or higher rating. The smaller ones will actually fit on the bottom of the PCB.

Once again the INET troops have come through--thanks!

72,

waYne

^

+----- I realized after all these years that
there's an antenna in my name...sortof...

Date: Mon, 24 Nov 1997 22:13:22 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [31281] Re: Interesting phenomenon: vertical vs horizontal antenna
Message-ID: <199711250513.WAA13999@usr05.primenet.com>

Howdy,

Tom (W1EAT) wrote:

>

> I have a 22' long vertical dipole, top at about 35', fed with 450 ohm
> window line, and 2 33' inverted vee dipoles up a little higher, fed
> ...

> In general, the vertical dipole is the worst of the lot, but not by a
> whole lot. If I was hurting for space, I'd rather have one of these up

Yet another data point. Couldn't ever get my inverted-vee much higher than 20ft off the ground at my QTH. When I

finally got my HB ground-mounted vert put up (with the 34 radials I could fit), it beat the pants off the inv-vee in every category, even the close-in states like CO, NM, etc. And thanks to Doc tonight I now have 14 Pelts with my HB vert this season, so I'd say it works pretty good. :)

Try 'em both out, keep 'em both up. Can never have too many antennas. :)

> Who needs aluminum, anyway?

I'm really starting to like this guy. ;-)

Copper! The choice of finer rodents the world over!

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"Veni Vertical Vamos - I came, I radiated, I left". -AB7TT

Date: Tue, 25 Nov 1997 05:10:48 -0500
From: "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>
To: qrp-l@Lehigh.EDU
Subject: [31281] Vert vs. Dipole (pt 2)
Message-ID: <3.0.16.19971125051006.226f9c1c@som-uky.campus.mci.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Sorry for so many messages... my thoughts are coming in short bursts (maybe the pain medication).

Just a lil more info on my particular antenna situation - The vertical (now two verticals in phase) has 32 radials mounted on the surface of the ground. It is on a hilltop, and most radials are sloping down hill from the vertical element.

The dipole is 30ft off the ground... not great, but not bad, for 40m.

See you Wednesday nite...Rich

Rich Dailey, KA8OKH <ka8okh@som-uky.campus.mci.net>
The KA8OKH / KB4NPI Web - <http://www.qsl.net/ka8okh>

Date: Tue, 25 Nov 1997 00:25:35 -0800
From: David Bixler <qrp@netins.net>
To: vhatley@flash.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31281] Re: Gophers ate my radials!
Message-ID: <347A8B7D.112182D9@netins.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Vernon A. Hatley wrote:

> Counterpoise instead of radials? If someone out there has
> had experience; good or bad; with a Butternut using a counterpoise instead
> of radials, I'd like to hear from you. I really don't have many more ideas
> let to try.

Hello Vern:

I had good results using a Butternut vertical at a couple of rental houses I lived in down in Florida. My method of installation was to mount the base of the Butternut up about 10 feet off the ground using a piece of pipe mounted alongside the screen porch. The pipe was just big enough to fit the Butternut mounting base into.

Then I installed elevated radials using strands of wire removed from 25 pair telephone cables. Ran them out over the house roof and also over the back yard to fences, trees, etc. Didn't measure the wire lengths, just ran them till they reached somewhere to tie them off to. Every wire was different.

Worked very well considering that I lived in the city at the time on a small residential lot. Didn't have any critters eat the radials and I believe that elevated radials are more efficient than the buried kind.

Worked Norway on 40 CW using 1/4 watt with it so I know it got out!

72,

David Bixler WOCH QRP: Minimum power, maximum fun!
Seneca, MO

Date: Tue, 25 Nov 97 00:07:41 PST
From: "Tim Ahrens" <tahrens@inetport.com>
To: ka8okh@som-uky.campus.mci.net, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31281] More fun facts and trivia!
Message-ID: <MAPI.Id.0016.00616872656e73203030303730303037@MAPI.to.RFC822>
MIME-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"; X-MAPIextension=".TXT"
Content-Transfer-Encoding: quoted-printable

OK, here's a new thread.... Betcha didn't know..

Just read Rich's posting about his dog Bean's 'masters voice stare'.

How many of you know the whole story? Now, now, don't everyone
raise their hands at once!!

I was up at the RCA Camden plant many years ago... don't know if it's
still there, but in the tower was a stained glass window of the dog in
that famous pose. Although you know that he was listening to a
phonograph, and probably know that it was 'his master's voice', did
you know why the dog really looked like that?

He was sitting on his master's coffin! I saw it on the window & it was
confirmed by the guys who worked there. They don't show that
portion of the picture in the Ads!

See what neat stuff you can read about on the qrp-1?

nighty night

Tim W5FN

ps: those in the know please feel free to elaborate & embellish
the above story if you know more.

Date: Mon, 24 Nov 1997 22:58:27 -0800
From: Bill Todd <bill@techline.com>
To: nwq-1@lscn.org
Cc: qrp-1@Lehigh.EDU
Subject: [31282] 15 meter QSO's?
Message-ID: <1.5.4.32.19971125065827.00703c94@mail.techline.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hello gang(s) -

I picked up an elderly HW-16 the other day, and I thought I'd like to work WAS with this little puppy. If anyone is interested in making a QSO on 15 meters,
I'll be listening to 21.050 most of the day this week (while I do my homework....yea right..ha).

CUL, Bill-N7MFB

Date: Tue, 25 Nov 1997 01:07:14 -0600 (CST)
From: Adrian Weiss <aweiss@sunflowr.usd.edu>
To: QRP-L@fidoii.CC.lehigh.EDU
Subject: [31283] RE: Vertical vs. Dipole
Message-ID: <Pine.SOL.3.94.971125000019.717B-100000@sunburst>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi gang: Interesting thread developing about the old vert. vs dipole, so I couldn't resist tossing in my two bits...

My observations over the years about vertical installations is that they guarantee inferior results when compared to a fairly low dipole, say, between 1/4 and 1/2-wave up, not exactly an ideal antenna itself. Remember the basic fact that a vertical is half-an-antenna. The dipole has its other half so that the traveling wave can develop normally with the +/- quarterwaves split in the middle. The vertical, assuming the usual 1/4-wave size (either full-length, or an electronic equivalent) is

missing the other half. It is replaced by the ground-plane on which the vertical is mounted and the function of which is to establish a return current path. Otherwise, current-return must occur via the dirt under the vertical, not an efficient system to say the least.

Spevik did a set of extensive controlled tests, published in QST back in the 70's or 80's, which plotted the effect of the number of radial wires on base radiation resistance and efficiency as indicated by field strength measurements. Although his basic objective was to measure the efficiency of seriously shortened vertical radiators (down to around 0.12-wave, if I recall correctly) with capacitive top-loading, his findings regarding the effect of radials is applicable to any vertical. The usual 4-radial ground-plane was virtually worthless, a significant improvement occurred with the increase to 16 radials, and about 45 radials raised the efficiency to about the level of a solid ground plane. Second, he found what theory had long predicted, and indeed, had been described in a much earlier classic piece in CQ (in the 60's?). The maximum amount of current-flow occurs in the vicinity of the base of the antenna -- sort of like laying down the current curve that develops moving from base to top of the vertical itself. The need for 45 $\frac{1}{4}$ -wave verticals was shown to be illusory. Shorter, "untuned" (i.e., random sizes) radials did just about as well as the full $\frac{1}{4}$ -wavers. The number of radials was the key.

Now, using an RX bridge, it is easy enough to get an idea of how efficient a given vertical installation is. First note the theoretical base radiation resistance for the $\frac{1}{4}$ -wave vertical -- figures out to around 36-Ohms. Then measure the radiation resistance of the vertical system. The amount of departure from that figure indicates the degree of inefficiency.

So, on to my story. I've been using verticals since I bought my first trap 40-10m vertical for \$8 back in 1964 -- it was a very good price for a pretty top-notch, expensive commercial unit. The OU Radio club had used it

during field day and someone had backed a pickup over while it was laying on the ground. Easy enough to cut out the tire-track sections and splice with hunks of copper pipe fastened with hose clamps. So who cared about dissimilar metal stuff back in those days? I ended up with an arrow-straight vertical which looked pretty unique with alternating aluminum and copper tubing. "Designer Antenna" at least. I was living in a 10x40 mobile home at the time, which I figured was an ideal ground-plane. So, I mounted the vert. on a piece of TV mast, flush with the roof, and connected the radial plate to the roof (I don't remember whether I scraped off the tar and steel-wooled it clean...). Then I carefully cut four $\frac{1}{4}$ -wave radials (40-10m) and stretched them with guy-wires. Well, it worked OK -- everyone knew that verticals are lousy, so I was getting out and feeling successful.

About 10 years later I ended up in a 12x60 mobile home -- beeg

ground-plane! So up went the old Designer Vert again. Worked out OK, but after having a Gem Quad at 50ft for 4-years and getting up to 67 countries during a bottom of the cycle, I knew what blood tasted like and I was really thirsty after using the vertical for a while. Then I got the bright idea of mounting a phased array in the center of the mobile home roof. Ordered a 20-10m trap unit (save \$\$\$, no 40m) -- mounted it on a harrowing machine 30" disk from local farm machinery store and set it in the middle of the roof, taking care this time to insure good electrical contact via a couple of cables. Since I was aiming at a phased array, I figured that I better be scientific about it -- up went the RX-Bridge and rig equipped with "hard-coax zero-length" connectors made from copper tubing etc. At resonance, the rad. resistance was 36-Ohms on the three bands. Curiosity got me for the simple reason that the tuning and bandwidth of this vert. seemed different from the other. So, I moved the gear to the edge of roof, took down the new vertical, put up the old one, and did measurements. Not even in the 30's! Thought it could be that the old vert had just had its day. So, out went the new vert to the edge. Same deal -- not even in the 30's! I was onto something! The old vert. moved to the center, and except on 40, around 36-Ohms. The fact of the matter is: although mounting the vert. at the edge of the roof was probably better than on the ground with 4 radials, the current loss due to the missing half of the ground plane simply was not compensated for by the monstrous size of the solid metal ground-plane taking care of the other half! Common sense suggests that when spherical dissemination of a wave is involved, leaving 180 degrees of the field open meant that at least half the current-return was lost. I never got into the math that would show amounts etc. but common sense is probably good enough since the wide departure from 36-Ohms is what is to be expected of an inefficient installation.

The end result was putting the two verticals in the middle of the roof, with compromise spacing and, if I recall correctly, cutting the phasing lines for 20 meters and taking what I got on the other bands. I aimed at forward gain vs front/back ratio. The F/B was about 4-6dB at best and varied as to incoming signal angle etc. However, the system worked really well. Since I hadn't gotten around to QSL'ing half of my original 60 or so countries, I had to work a bunch again plus the rest. But the array produced consistent DX and breaking pile-ups was almost routine during contests. I loved the time when the DX-pedition guy would recognise my call and break the run while asking me whether I was QRP and how much and how many have I worked. Must have frosted the KW's! the JOY OF QRP, eh?

So, having rambled on as usual, the point is: a vertical is only as good as the ground-plane under it. Other factors enter in, of course -- the ground conductivity in the near field is a very important factor. However, the suck-in at the Brewster angle is something that can't be eliminated -- nor do I think it has to be. It is balanced out by the ground-loss in the reflected signal from a horizontal dipole over real dirt. To get the field radiated from an efficient vertical above the Brewster Angle, you

really have to push a dipole up pretty high electrically speaking. But the efficiency of the horizontal, in relative terms, is much less dependent upon what is under it than is the vertical.

In the final analysis, most of us make the best of what is available. If you have to settle for a vertical, then shoot for 40-50 radials at the base, and make them as long as possible between 1/8 & 1/4 wave. The number is more important than the length. Talk the XYL into a new rock-garden or flower bed strategically located in the middle of the backyard (or even the front yard), then send her to visit relatives for a couple days. While she's gone, carefully remove a 40x40 section of sod, pick up a bunch of rolls of aluminum flashing and/or sheeting from the local plumber, lay it out to form as solid a plane as possible, poke a bunch of holes for water drainage and root clearance, drive the mounting pipe into the ground, bond it with the metal, then roll the sod back in place minus the spot for the rock garden. No one will know the difference -- probably just wonder why you can put up a silly pole in the middle of a flower garden in which flowers seem to die with alarming regularity. A rock garden doesn't have that built-in drawback. Whatever. It's 0100 and I'm out of suggestions -- just use your imagination and think big -- like highway contractors and skyscraper guys.

73, Ade W0RSP

Date: Mon, 24 Nov 1997 14:45:21 -0800
From: "Frank A. West" <ke6vhm@earthlink.net>
To: <n4xy@bellsouth.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31284] Re: QRP tip or 2
Message-ID: <199711250726.XAA08989@iceland.it.earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Where does the Novice/Teck fox hang out? And what time? Please
TTFN 73 Frank KE6VHM
Grid Square DM13
Woodcrest, CA
CW Forever

> From: Ed Tanton <n4xy@bellsouth.net>
> To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
> Subject: QRP tip or 2

> Date: Monday, November 24, 1997 1:10 PM
>
> Hi Jim... Yes, 72 is a QRP version of 73. I would advise two things:
don't
> expect much success from CQs... and try to 'tail end' QSOs... that is,
call
> guys when they finish a QSO. Of course, answering CQs is OK. I PLAN to be
> on tonight myself, firing up for the first time my semi-boat anchor
Signal
> One CX-7A on-or about- 7018 and 7042 KHz. Sometime after 1900 EST. Be
happy
> to QSO.
>
>
> 73
>
> -----
> Ed Tanton N4XY EMAIL: n4xy@bellsouth.net
> 189 Pioneer Trail
> Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX
>
> -----
> INTERESTS: QRP BoatAnchors Test Equipment Photography
> CW: 99.9% Mercury Paddle # 0214 QRP or 90W: 95%
> ~~~~~
> "Think you can, think you can't: either way you're right!" Henry
Ford
> ~~~~~
>

Date: Tue, 25 Nov 1997 04:51:15 -0500
From: "david's" <elim@ime.net>
To: <aweiss@sunflowr.usd.edu>, "Low Power Amateur Radio Discussion" <qrp-
l@Lehigh.EDU>
Subject: [31285] Re: Vertical vs. Dipole
Message-ID: <01bcf987\$ac0bffe0\$LocalHost@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit

Dear Ade,

It's good to hear from you again on any subject ,
You were the main force in introducing me to QRp back in the early 1970's.
I still get excited when I think of the joy I had in working my first JA on
15 meters from Texas then with only 1 w and a ground mounted 15 meter

vertical.

The vertical was mountd in our backyard which border at that time miles and miles of flat desert. Had 120 radials under it .. and never before or since have I had a vertical that worked as well as that one. I attribute the sucess to some degree to the opening to the horizan.. and i think this may be one thing that is forgott about verticals in our day. not that they won't work in a small backyard.. but the work much better when ground mounted with lots of radials and few nearby obstructions. For the most part in the interveining year and at most of the Qth's I've been able to works from .. the horizontal antennas made with wire have out done the verticals i've used. But I've always found that under some circumstances the vertical works better.. thus have always attempted to have some from of vertical radiator that I can switch to for comparison and it has made the difference from here in Maine , now, it getting VK, And Zl's best being VK9 Qrp . So if you only have the oppurtunity to put up one antenna I would say put up the Dipole even low to the ground.. The cost and ease of tuning the thing just can't be beet.. But if you can include some sort of verital radiator in your antenna farm, it will help to give you the qrpers edge on some of those expecially long haul contacts.

Put up both if you can.. build you own vertical.. and pocket the money you save .. 300 to 1000 bucks is too much in my mind to pay for a veritcal antenna and one of the things that has always drawn me back to qrp over the years is being able to have 10x the joy and half the invested money in the qrp station as the qro boys..

my two cents worth..72&73 Dave Kc1di
qrp dxcc (40 & 30 Meters) qrp arci 3843 presently using a ten-tec scout turned down to 3 or 4 watts. battery power, and any of a number of wire antennas that change weekly almost.. though with snow on the ground now they may be set for the winter.. hi , hi.

-----Original Message-----

From: Adrian Weiss <aweiss@sunflowr.usd.edu>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Date: Tuesday, November 25, 1997 2:09 AM

Subject: RE: Vertical vs. Dipole>it with the metal, than roll the sod back in place >

>73, Ade W0RSP

>

>

>

>

>

Date: Tue, 25 Nov 1997 08:53:37 -0500
 From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
 To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>
 Subject: [31286] FOX Log 11/25/97
 Message-ID: <199711250855_MC2-2998-C81F@compuserve.com>
 MIME-Version: 1.0
 Content-Transfer-Encoding: 7bit
 Content-Type: text/plain; charset=us-ascii
 Content-Disposition: inline

Gang:

Here is my log for last evening. Have double- and triple-checked it. But there are still errors, so please send me corrections ASAP. Thanks in advance for your help.

TIME	CALL	SENT	RCVD	ST	NAME	#/PWR
----	----	----	----	--	----	-----
0000	W0CH	569	559	MO	Dave	618
0001	N4JS	549	559	NJ	John	884
0002	AC4HF	559	549	TN	Jeff	98
0005	W5TFB	579	579	TX	Jack	282
0007	K5JHP	569	559	TX	Bill	825
QSY.....						
0012	AB5UA	569	579	OK	Clif	478
0013	AB7TT	559	559	AZ	Joe	5w
0015	K5ON	569	589	NM	Gary	770
0017	VE5WF	559	599	SK	Earl	1076
0018	N6MM	549	579	CA	Harvey	318
0019	K5OI	579	569	NM	Tim	73
0020	W6ZH	559	559	CA	Pete	257
0022	N6ZS	569	569	IA	George	5w
0024	W2UX	579	579	SC	Gary	593
0026	WA9PWP	559	449	WI	Paul	127
0028	N5ALO	569	579	TX	Bill	415
0029	N3YSI	559	559	PA	Paul	5w
0031	N9KW	589	559	IL	John	1257
0033	W5HNS	579	559	TX	Henry	178
0033	KA7OKH	569	559	KY	Rich	933
0035	VE5RC	559	229	SK	Bruce	889
0036	VE3JC	329	539	ON	John	744
0038	N7KT	549	559	AZ	Roger	62
0041	KI7MN	569	449	AZ	Bob	271
0043	N4ROA	569	549	VA	Dan	970
0044	AA1MY	599	579	CT	Seab	574
0046	N6WG	339	339	CA	Bob	26

0047	N5LU	559	559	OK	Bill	5w
0048	K5TZY	579	559	TX	Bill	473
0049	NQ7X	339	559	AZ	Floyd	343
0051	N7GS	569	539	UT	Mal	815
0054	N7XJW	579	599	AZ	Bertie	1259
0055	N9DD	559	559	IN	Tom	32
0057	WB9HFK	559	559	IL	Mark	1159
0059	K2VCO	559	569	CA	Vic	725
0102	N7VE	589	559	AZ	Dan	5w
0103	K10J	579	579	TX	OJ	732
0105	AB7MY	559	559	AZ	Gary	571
0106	N8CW	549	549	OH	Bob	4w
0107	K8NWD	569	559	MI	Tim	5w
0109	K5ID	579	569	AR	Ken	652
0110	K8CV	559	559	MI	Walt	935
0114	W6BAB	559	559	CA	Harvey	5w
0115	AC5II	559	339	OK	Don	264
0117	W0RW	559	599	CO	Paul	2w
0119	WB0T	339	339	IA	Jerry	????<-
0121	N5ZN	449	569	TX	Anibal	736
0124	K5UP	559	559	OK	Glen	21
0126	W7OT	599	339	IA	Jerry	1268
0128	N2GO	549	449	NY	Jim	381
0131	WD4MSM	569	559	TN	Harry	642
0135	AC6LA	339	559	CA	Dan	515
0138	W7QQQ	439	559	AZ	Jack	1210
0140	W7SSM	559	339	CA	John	1048
0142	WB0CLD	589	559	MO	Bill	279
0144	AB7TK	559	339	ID	Randy	102
0146	VE3ELA	439	539	ON	Ken	1226
0149	N6XU	589	229	CA	Stan	66
0151	W5FN	579	559	TX	Tim	586
0154	W7GVN	559	559	AZ	Rod	849
0156	K6VNX	339	559	CA	Arlen	5w
0158	N0TFI	569	569	CO	Jess	1232
0159	N8ET	569	459	OH	Bill	498

I will post some observations later. It was a good experience for me, and I hope for all hunters. Again, sorry I was unable to work everyone.

It is interesting to note the spread of hunters across thre country.

Thanks again one and all for taking time to hunt the FOX. Let's do it again, say late February 1998... :-)

72/73,

--Doc/K0EVZ qrp-1 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL WAS 48/40

DXCC 56/42 <>< FOX Total 11/25/97 13 of 16. The FOX 11/25/97.

Icom 751A Omni V Sierra Argo 515 Norcal 40a SW-40 49er
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom
SLV/W6MMA G5RV Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Tue, 25 Nov 1997 08:56:38 EST
From: kt3a@juno.com
To: vhatley@flash.net
Cc: qrp-1@Lehigh.EDU
Subject: [31287] Re: Gophers ate my radials!
Message-ID: <19971125.085456.5415.11.kt3a@juno.com>

Vern,
The rodent family is drawn many times by the plastic or vinyl coating
on cables. I've seen Pennsylvania groundhogs crawl up into vehicles
and chew the radiator hoses, and wiring harness assemblies.
(And you thought they just predicted an early spring!)
There are some products that are buried with cables to deter this,
but with EPA, etc I don't know if they are still around.

Cameron C.R. Bailey <><
Amateur Radio, KT3A
kt3a@juno.com
Mount Wolf, Pennsylvania

Date: Tue, 25 Nov 1997 09:58:26 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: cw@qth.net, eax@w3eax.umd.edu, qrp-1 <qrp-1@Lehigh.EDU>, Laurel ARC <larc-1@webtrek.com>
Subject: [31288] Ham exam-generating site, also does CW up to 50 wpm!
Message-ID: <Pine.LNX.3.95.971125095306.20053A-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

<http://www.biochem.mcw.edu/Postdocs/Simon/radio/exam.html>

This site is run by Simon, AA9PW, and generates random exams from the
question pools (and e-mails them to you, with answers) as well as code

tests (and random stuff, if you prefer) as .au files. If you've chosen a Morse exam, It also poses a 10-question, multiple choice test on the context.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 80 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* Charter member, Maryland Milliwatters * W3-VK on 3w mobile CW *
*** 301-549-1022 h / 301-982-1015 w ** Life is one big hamfest ***

Date: Tue, 25 Nov 1997 08:16:27 -0600
From: "Ratray, Bruce" <Ratray@sias.sk.ca>
To: "'70511.3041@compuserve.com'" <70511.3041@compuserve.com>
Cc: "'QRP-L'" <qrp-l@Lehigh.EDU>
Subject: [31289] RE: FOX Log 11/25/97
Message-ID: <ABB04875E11AD01191A40000F83092BE566F11@stone.sias.sk.ca>
MIME-version: 1.0
Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7BIT

Morning Doc!...little correction...my QRP-L# is 886...well that was one of my more interesting contacts in the Fox hunts...I didn't get back home until 0030Z and with the band going long early every night lately, I was concerned... especially since I knew I couldn't be around for Wednesday night's fox...as I settled into the ham shack chair, Bonnie brought me our wireless phone and it was Earl, VE5WF, telling me you were on and he had worked you with a big signal...so I thanked Earl and tuned around and found you...one difference...the bottom had fallen out and you were barely coming through...aaaarrgh...have to try anyway....you weren't even moving the S meter here...your signal wasn't strong enough for my audio filter to grab it and ring the hell out of it...which is how I work many foxii...HI HI...so I relied on my ears and if your signal had been any weaker at all, I wouldn't have heard you...if was as if I was copying soft "pulses" instead of morse code... HAR!...really interesting Doc and a very unique contact indeed...I'm wondering if anyone else has had a similar "soft pulses" experience?...fun again!...72 - Bruce(VE5RC + VE5QRP)

> -----
> From: Wilford D. Lindsey[SMTP:70511.3041@compuserve.com]
> Reply To: 70511.3041@compuserve.com
> Sent: Tuesday, November 25, 1997 7:53 AM
> To: Low Power Amateur Radio Discussion
> Subject: FOX Log 11/25/97
>

> Gang:

>

> Here is my log for last evening. Have double- and triple-checked it.

> But

> there are still errors, so please send me corrections ASAP. Thanks in

> advance for your help.

>

> TIME	CALL	SENT	RCVD	ST	NAME	#/PWR
--------	------	------	------	----	------	-------

> ----	----	----	----	--	----	-----
--------	------	------	------	----	------	-------

> 0000	W0CH	569	559	MO	Dave	618
--------	------	-----	-----	----	------	-----

> 0001	N4JS	549	559	NJ	John	884
--------	------	-----	-----	----	------	-----

> 0002	AC4HF	559	549	TN	Jeff	98
--------	-------	-----	-----	----	------	----

> 0005	W5TFB	579	579	TX	Jack	282
--------	-------	-----	-----	----	------	-----

> 0007	K5JHP	569	559	TX	Bill	825
--------	-------	-----	-----	----	------	-----

> QSY.....

> 0012	AB5UA	569	579	OK	Clif	478
--------	-------	-----	-----	----	------	-----

> 0013	AB7TT	559	559	AZ	Joe	5w
--------	-------	-----	-----	----	-----	----

> 0015	K5ON	569	589	NM	Gary	770
--------	------	-----	-----	----	------	-----

> 0017	VE5WF	559	599	SK	Earl	1076
--------	-------	-----	-----	----	------	------

> 0018	N6MM	549	579	CA	Harvey	318
--------	------	-----	-----	----	--------	-----

> 0019	K5OI	579	569	NM	Tim	73
--------	------	-----	-----	----	-----	----

> 0020	W6ZH	559	559	CA	Pete	257
--------	------	-----	-----	----	------	-----

> 0022	N6ZS	569	569	IA	George	5w
--------	------	-----	-----	----	--------	----

> 0024	W2UX	579	579	SC	Gary	593
--------	------	-----	-----	----	------	-----

> 0026	WA9PWP	559	449	WI	Paul	127
--------	--------	-----	-----	----	------	-----

> 0028	N5ALO	569	579	TX	Bill	415
--------	-------	-----	-----	----	------	-----

> 0029	N3YSI	559	559	PA	Paul	5w
--------	-------	-----	-----	----	------	----

> 0031	N9KW	589	559	IL	John	1257
--------	------	-----	-----	----	------	------

> 0033	W5HNS	579	559	TX	Henry	178
--------	-------	-----	-----	----	-------	-----

> 0033	KA7OKH	569	559	KY	Rich	933
--------	--------	-----	-----	----	------	-----

> 0035	VE5RC	559	229	SK	Bruce	889
--------	-------	-----	-----	----	-------	-----

> 0036	VE3JC	329	539	ON	John	744
--------	-------	-----	-----	----	------	-----

> 0038	N7KT	549	559	AZ	Roger	62
--------	------	-----	-----	----	-------	----

> 0041	KI7MN	569	449	AZ	Bob	271
--------	-------	-----	-----	----	-----	-----

> 0043	N4ROA	569	549	VA	Dan	970
--------	-------	-----	-----	----	-----	-----

> 0044	AA1MY	599	579	CT	Seab	574
--------	-------	-----	-----	----	------	-----

> 0046	N6WG	339	339	CA	Bob	26
--------	------	-----	-----	----	-----	----

> 0047	N5LU	559	559	OK	Bill	5w
--------	------	-----	-----	----	------	----

> 0048	K5TZY	579	559	TX	Bill	473
--------	-------	-----	-----	----	------	-----

> 0049	NQ7X	339	559	AZ	Floyd	343
--------	------	-----	-----	----	-------	-----

> 0051	N7GS	569	539	UT	Mal	815
--------	------	-----	-----	----	-----	-----

> 0054	N7XJW	579	599	AZ	Bertie	1259
--------	-------	-----	-----	----	--------	------

> 0055	N9DD	559	559	IN	Tom	32
--------	------	-----	-----	----	-----	----

> 0057	WB9HFK	559	559	IL	Mark	1159
--------	--------	-----	-----	----	------	------

> 0059	K2VCO	559	569	CA	Vic	725
--------	-------	-----	-----	----	-----	-----

> 0102	N7VE	589	559	AZ	Dan	5w
--------	------	-----	-----	----	-----	----

> 0103	K10J	579	579	TX	OJ	732
--------	------	-----	-----	----	----	-----

> 0105	AB7MY	559	559	AZ	Gary	571
--------	-------	-----	-----	----	------	-----

> 0106	N8CW	549	549	OH	Bob	4w
> 0107	K8NWD	569	559	MI	Tim	5w
> 0109	K5ID	579	569	AR	Ken	652
> 0110	K8CV	559	559	MI	Walt	935
> 0114	W6BAB	559	559	CA	Harvey	5w
> 0115	AC5II	559	339	OK	Don	264
> 0117	W0RW	559	599	CO	Paul	2w
> 0119	WB0T	339	339	IA	Jerry	????<-
> 0121	N5ZN	449	569	TX	Anibal	736
> 0124	K5UP	559	559	OK	Glen	21
> 0126	W7OT	599	339	IA	Jerry	1268
> 0128	N2GO	549	449	NY	Jim	381
> 0131	WD4MSM	569	559	TN	Harry	642
> 0135	AC6LA	339	559	CA	Dan	515
> 0138	W7QQQ	439	559	AZ	Jack	1210
> 0140	W7SSM	559	339	CA	John	1048
> 0142	WB0CLD	589	559	MO	Bill	279
> 0144	AB7TK	559	339	ID	Randy	102
> 0146	VE3ELA	439	539	ON	Ken	1226
> 0149	N6XU	589	229	CA	Stan	66
> 0151	W5FN	579	559	TX	Tim	586
> 0154	W7GVN	559	559	AZ	Rod	849
> 0156	K6VNX	339	559	CA	Arlen	5w
> 0158	N0TFI	569	569	CO	Jess	1232
> 0159	N8ET	569	459	OH	Bill	498

>

> I will post some observations later. It was a good experience for me,
 > and I hope for all hunters. Again, sorry I was unable to work
 > everyone.

>

> It is interesting to note the spread of hunters across thre country.

>

> Thanks again one and all for taking time to hunt the FOX. Let's do it
 > again, say late February 1998... :-)

>

> 72/73,

> --Doc/K0EVZ qrp-1 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19
 > nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL WAS 48/40
 > DXCC 56/42 <>< FOX Total 11/25/97 13 of 16. The FOX 11/25/97.

>

> -----

> Icom 751A Omni V Sierra Argo 515 Norcal 40a SW-40 49er

>

> Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom

>

> SLV/W6MMA G5RV Autek QF-1 RS DSP-40

>

> "Things should be as simple as possible, but no simpler"--A. Einstein

>
>

Date: Tue, 25 Nov 1997 10:12:46 EST
From: ab5uacw@juno.com (Clifton W Sikes)
To: qrp-1@Lehigh.EDU
Subject: [31289] Ade.....Thank you
Message-ID: <19971125.090645.4863.1.ab5uacw@juno.com>

Ade, thanks for your great posting. You said a lot of what I was thinking, but didn't get said. Red dirt=cunductive soil. The more metal under the verical, the better. You are a real treasure, sir. Thanks for being here for us.

Joe, AB7TT, your line about rodents and copper had me rolling in the floor. This bunch is the greatest!!! Everyone have a fantastic Thanksgiving.

72, Clif

Clifton Sikes AB5UA
Earlsboro, Ok.
ab5uacw@juno.com

Date: Tue, 25 Nov 1997 10:21:13 -0500 (EST)
From: Scottae4vq@aol.com
To: qrp-1@Lehigh.EDU
Subject: [31290] Ideas for multiband rig
Message-ID: <971125102113_1272364249@mrin84.mail.aol.com>

Dear Group:

Anyone have a good ideas for a reliable QRP-multiband rig ?

I was going to purchase the TenTec Argo, but it is not in production anymore. I am tired of waiting for the release of the SGC-2020.

Would appreciate any thoughts on the matter... please reply direct if possible.

Best holiday wishes,

Tnx es 72's... Scott AE4VQ QRP-L #418

Date: Tue, 25 Nov 1997 10:22:19 -0500
From: Randy Hargenrader <randyh@harksystems.com>
To: qrp-l@Lehigh.EDU
Cc: klqrp@acpub.duke.edu
Subject: [31291] Pixie/40-9er Contest Rules
Message-ID: <347AED2B.5BB3@harksystems.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Another reminder for the Pixie/40-9er Contest!!
Clubs with "QRP" calls PLEASE plan to operate with ANY
type rig to give the other guys some bonus points!

The Pixie and 40-9er Contest Rules

Dates/Time:

The contest will be held over a five day period, Friday, December 26th, through Tuesday, December 30, 1997. Hours will be 0100Z to 0300Z each night. You will report your best 3, two hour operating periods. You can operate for two hours each of the five nights, but you can only include your best three nights in your contest log.

Frequencies:

80 meters and 40 meters. Common frequencies for this contest are:
3.560, 3.686, 3.715, 7.040, 7.122 MHz.

Exchange:

The exchange will be RST, State/Province/Country, a 2 letter rig code and Name. The Rig Code will be used from the list below.

Scoring:

Points will be weighted to contacts by and with Pixies and 40-9ers.

*Note: Working any WQ_RP station multiplies that QSO points by 10!!!

For example: A "Pixie to QRP" QSO would net 20 points.
The WQ_RP station gets the standard points. The other
station gets the bonus points.

*Pixie to Pixie	- 6 points
*Pixie to 40-9er	- 4 points
*Pixie to QRP	- 2 points
*Pixie to QRO	- 1 point

*40-9er to 40-9er	- 4 points
*40-9er to QRP	- 2 points
*40-9er to QRO	- 1 point

*Multiplier = SPC worked.

There are many versions of the 40-9ers with output powers and
mods that vary including conversions to 80 meters. They are all
considered "40-9ers" for scoring.

Rig Codes:

Pixie	PX
40-9er	49
80-9er	89
A&A	AA
Green Mtn	GM
Home Brew	HB
HeathKit	HW
Icom	IC
Index Labs	IL
Kenwood	KW
LCK	LC
MFJ	MF
Norcal	NC
Northeast	NE
Northwest	NW
Oak Hills	OH
Oner	ON
Sierra	SA
S&S Rigs	SS
Small Wonder	SW
TenTec	TT
Wilderness	WR
Radio	
Yaesu	YS

Awards:

The operator making the most contacts using a Pixie will receive a Digital Dial kit donated by the Radio Adventures Corp.

The operator making the most contacts using a 40-9er will receive a Tick Keyer kit donated by the KnightLites.

The operator making the most contacts with 40-9er's and Pixie's while operating any other rig will receive a Tick Keyer kit donated by the KnightLites.

Award Certificates will be issued for operators who earn the second and third highest scores for the Pixie, XX-9er, and "other rig" categories.

One person may only win one award. In the event that one person qualifies for more than one award, they will receive the one of the greatest value. In cases of ties, a coin will be flipped. The contest chairman, Randy Hargenrader, may participate but is not eligible for prizes and awards.

Reporting:

Send your logs before January 30, 1998 to:
Randy Hargenrader, WJ4P
132 Brandywine Dr
Summerville, SC 29485

Results will be posted on QRP-L and the Knightlite's Home Page.

--

73, Randy WJ4P
Knightlites QRP-L #296

Date: Tue, 25 Nov 1997 10:26:47 -0500
From: Randy Hargenrader <randyh@harksystems.com>
To: qrp-l@Lehigh.EDU
Subject: [31292] QRP Clubs w/ QRP CALLS
Message-ID: <347AEE37.285@harksystems.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang,
For the upcoming Pixie/40-9er Contest it would be really SWELL if the clubs with "QRP" calls would operate ANY radio in order to give the other stations some bonus points! It would be an

advantage to operate a "real" radio to tune around and pick out all the Pixies and 40-9ers that will be operating. So, please make your plans to man your stations! And, Thanks! in advance...

--

73, Randy WJ4P
Knightlites QRP-L #296

Date: Tue, 25 Nov 1997 10:34:04
From: Steven Weber <kd1jv@moose.ncia.net>
To: aplitech@spacestar.net
Cc: qrp-l@Lehigh.EDU
Subject: [31293] Re: Blue Film for PCB's (was Re: photosensitive pc boards
Message-ID: <3.0.1.16.19971125103404.22bf2a6a@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>
>I do need to get some of the "blue film" to try, I'd told that works very
>well. Anybody know where to get it?
>
ALL Electronics has it TEK-5, 5 sheets for \$11.95 (1-800-826-5432)

That's pretty expensive in my book. You can also get it direct from
Techniks
PO box 463
Ringoos, NJ 08551

But you have to buy in bulk, 40 sheets for \$50.00. There is also a 20 sheet price, but don't have the price handy, believe its 20 sheets for \$30.00 (\$4.00 S+H)

I bought the 40 sheet deal, as I use a lot of the stuff. I can draw an artwork on the computer, print it out to the PnP Blue with the laser printer and make a board in a few hours. To make the stuff last longer, I cut a piece a little bigger than my board and tape it to a piece of paper. (first print to paper to find where the board is printed) Not sure if you can do this with a copy machine, I've never tried it.

It takes a little practice to get the hang of using this stuff, as you might expect. Once you get the hang of it, you should have about a 90% success rate. I did a long post on using PnP film a while back, it's somewhere in the archives.

Standard disclaimer, just very happy with this film.

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Tue, 25 Nov 1997 10:37:15 -0500
From: Randy Hargenrader <randyh@harksystems.com>
To: qrp-l@Lehigh.EDU
Cc: klqrp@acpub.duke.edu
Subject: [31294] Pixie Contest/Individual QRP Calls
Message-ID: <347AF0AB.4F5E@harksystems.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang,
There's a lot of "QRP" type calls out there that aren't
club calls. The "EL Supremo Contest Manager" has made
a decision to include all "QRP" type calls in the bonus
QSO category. This means that the "QRP call" station
gets regular points for the contact, and the other station
gets the bonus points.
Thanks to all the "QRP calls" stations that have offered
to join the fray and hand out early Christmas gifts!!

--
73, Randy WJ4P
Knightlites QRP-L #296

Date: Tue, 25 Nov 1997 07:37:38 -0800 (PST)
From: Monte Stark <ku7y@sage.dri.edu>
To: kt3a@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31295] Re: Gophers ate my radials!
Message-ID: <Pine.SUN.3.90.971125073555.16780C-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 25 Nov 1997 kt3a@juno.com wrote:

> There are some products that are buried with cables to deter this,
> but with EPA, etc I don't know if they are still around.

Don't think there is. We used to use wire that would posion the little chewing critters but the do-gooders did away with that! After all, they don't have to do the work and if they loose service they just sue you!

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Tue, 25 Nov 1997 10:40:04 -0500 (EST)
From: NilsBull@aol.com
To: QRP-L@Lehigh.EDU
Subject: [31296] Rodents ate my linear!
Message-ID: <971125104002_2072709544@mrin79>

Gang,

I ain't jokin'! One of the reasons that I am now a QRPist is the simple fact that one day, when I'd been out of the outhouse shack for some time, I went in there, fired up the radios and then turned on the amp. Sparks and arcs. The meter damn near flew off the front panel (I still have to get a replacement).

I opened the box and found a mouse nest and a whole pile of wire that had been chewed, blued and tattooed. Damn thing ate the insulations off all the 110v lines, the bottom of the HV lines and some of the wiring between switches and the meter.

Guess next time I'll have to cover those extra holes from where I rebuilt the damn thing. Couldn't use it now anyway. Even the TR7 at full power dims the lights just a tad. I can see the voltage drop on the meter what's on the CIA radio I got from Fair Radio Sales some time back.

Zot! Too bad the mouse had moved. I could've had a mouse on toast, just like some 18th century scientist guy what was mentioned on "Connections." Hmmm . . .

"Connect this, rodents!" ZOT!

73
Nils

WB8IJN &c

.. . biggest problem here for power outtages is the squirrels what try to warm up on the pole-pigs. . . .ZOT!

Date: Tue, 25 Nov 1997 07:51:50 -0800
From: Vic Rosenthal <rakefet@rakefet.com>
To: dannyayers@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31297] Re: Stainless steel contacts and the NorCal Paddles
Message-ID: <347AF416.1C54561C@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

danny k ayers wrote:

>
> Well, my curiosity has finally gotten the better of me. As I paint
> and repaint and repaint my NorCal paddle base (on the third, and I hope > final,
try), I keep pondering a post a few months back concerning the
> use of stainless steel for contact material.

I think it's true that stainless would be a lousy contact material for cathode keying, say, an 813. But modern keyers pass so little current through the contacts, are debounced, etc., so probably stainless, gobs of solder, pieces of rusty bedspring, and pure gold are equally good.

My opinion, of course, maybe wrong.

BTW, concerning painting Norcal paddle bases: I got some Plasticote wrinkle paint at Pep Boys, and it looks great! In addition to the retro look of wrinkle (matches my WW2 Navy RBL receiver), all you have to do to the surface to prepare it is wire-brush the rust and scale off, and shoot it with some primer. If you do this, dry the wrinkle paint in the oven -- I had it in for a couple of hours at a temperature estimated to be about 175 degrees f. (the XYL went out to her book group last night, heh, heh). The hair dryer method is no good, because the dryer blows dust in addition to heat!

Vic K2VCO

Date: Tue, 25 Nov 1997 10:51:44 -0500
From: "Ken Hanks" <kennfd@ibm.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>, <rakefet@rakefet.com>
Subject: [31297] Re: Interesting phenomenon: vertical vs horizontal antenna experience
Message-ID: <01bcf9ba\$079b9000\$437e2581@kh>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Vic wrote:

>Hm. Well, I really was surprised that my neighbor's antenna didn't at
>least equal my dipole. He has the base at 42' above the ground.

Cushcraft recommends the antenna be 8 feet above the ground!

Ken Hanks K1XS@ibm.net

Date: Tue, 25 Nov 1997 16:15:43 +0000
From: Ed Loranger <we6w@qsl.net>
To: mgipe@reliablemeters.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31298] Re: Norcal paddles
Message-ID: <347AF9AF.4555@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Michael A. Gipe wrote:

>
> Gang -
>....<snip story of paddle work.>
> I did
> go ahead and put the magnet into the center piece late last night. All I
> can say is I did NOT have a problem with the magnet sliding out of the
> brass piece. In fact, the vise wasn't strong enough to force it in -- I
> had to use a hammer (and added a few more scratches in the process). But
> it ain't comin'out now, nohow!
>

Oh yeah. Same here.

> Any metal mavens out there who can advise me on better ways to polish the

> brass to a perfect mirror finish? I know it can be done, because I have a
> set of Envirotronic paddles which are perfectly polished. I sanded the
> pieces with, in order, 240 grit, 400 grit, and 600 grit carbide paper. Then
> I hand-polished with automobile rubbing compound, followed by automobile
> polishing compound, followed by Brasso. Who knows, I just might be sick
> enough to do another one, after my fingers recover!

Mike, use 400 grit then 600 grit. To make a mirror finish all you do is put brasso on the sandpaper as you sand the brass.

I've found polishing compounds work differently on steel and brass. Stick with Brasso and plain old jewlers rouge. Dip cloth tipped finger in the brasso, brush finger across jewlers rouge, polish brass. Eventually finish with dry jewlers rouge and polish till you see the color of your eyes reflected!

> My wife looked at my
> operating desk and laughed. She just doesn't understand why I would need to
> build another paddle when I already have four on the desk. (There is also
> one microphone, but it hasn't been used in over a year -- in fact, it has
> never been used on the current rig.)
What's a microphone -- Hi! :)

>
> I have to agree with the others who said that they would prefer a closer
> spacing on the paddle handles. My suggestion to Doug and Doug would be to
> put the rabbet for the Plexiglas (tm) pieces on the inside of the paddle
> arms in future production runs.

I like the spacing. No, this is not the "Empereror's new clothes"
I really DO like the spacing. Ergonomic. But I think a method to adjust spacing would be necessary for TRUE Ergo. fit.

>
> I think that after I've finished assembling it, I will have the most
> expensive \$30.00 keyer paddle ever built. It sure is nice and compact.
>
> I had planned to use this paddle for 'to the field' operations, but after
> putting in all these hours making it look pretty, I might have to put it
> into a display case under lock and key!

I understand. But all that work means it will withstand the WX and probably a drive-by shooting with 20 coats of paint!

>
> I will bring them to the next NorCal meeting for show and tell, after
> testing them on the Wednesday night fox, of course.
>

> Mike K1MG

FB Mike. Wish I had a car so I could go too!! (Santa Rosa QTH)

>

>

Mine are cute too!

-Ed L.

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)

HW-8,OHR-100, Pixie2, Johnson Viking II, Drake TR-3

QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok

mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Tue, 25 Nov 1997 11:34:26 EDT

From: "CHARLES LESKIE" <CLESKIE@um-f1.umd.umich.edu>

To: qrp-l@Lehigh.EDU

Subject: [31299] MFJ 1796 and 1621 antennas

Message-ID: <45417E44876@um-f1.umd.umich.edu>

MIME-Version: 1.0

Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7BIT

I wonder if anyone has any experience with either of these antennas.

The 1796 is a 40 thru 10 vertical.

The 1621 is a compact portable hf antenna.

Would appreciate any feedback on either of these antennas.

Chuck KG8ZH

Date: Tue, 25 Nov 1997 08:53:42 -0800

From: "Michael A. Gipe" <mgipe@reliablemeters.com>

To: <tahrens@inetport.com>

Cc: "QRP-L list server" <qrp-l@Lehigh.EDU>

Subject: [31300] Re: What a night!

Message-ID: <199711251748.LAA25939@multi13.netcomi.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

Tim --

Just got your QSL cards in the mail yesterday. Thanks. I think your fox card is one of the classiest cards I've ever gotten!

Jess just likes living on the edge. Making your first call to the fox at 01:59:30 has to be supreme confidence!

Mike K1MG

Date: Tue, 25 Nov 1997 10:05:38 -0700 (MST)
From: bcutter@teal.csn.net (Bob Cutter)
To: mgipe@reliablemeters.com
Cc: qrp-1@Lehigh.EDU
Subject: [31301] Re: Norcal paddles
Message-ID: <199711251705.KAA10325@ns-1.csn.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

The 240, 400, 600 is Ok but make sure you sand at 90 degrees for each one so you can tell when you have all the previous scratches out.

They I go to Tripoli, a brown polishing compound and then to Red Rouge, another polishing compound. Both of these are very inexpensive but only come in what will be a lifetime supply. If you can find a hobby jeweler they might give you a chunk of each. You should use different cloth wheels for each and do not interchange. Clean up with an amonia/water solution.

72, Bob KI0G

Date: Tue, 25 Nov 1997 11:22:23 -0600
From: n5inz@juno.com (John M Andrews)
To: qrp-1@Lehigh.EDU
Subject: [31302] HB: Another well-worn topic
Message-ID: <19971125.112223.3414.5.N5INZ@juno.com>

I never seem to get organised AND seem to have 20-25 projects going at the same time.

Was in Wal-Mart a few days ago and noted some shoe-box sizes boxes (plastic) with lids for a buck. Great storage concept at a fair price.

No.1 was the VFO, filter, and box for the R-1 that Bill Kelsey is shipping.

No.2 for the huge amount of unsorted resistors.

No.3 is the 6 meter project.

No.4 for the giant computer grade caps that seem to run from one junk-box to the next.

No. 5 Wall warts.

Well...you get the idea. I used masking tape as it is easy to pull off when

a project is done and a felt tipped marker to indicate contents. Delicate items such as B&W/Air Dux coils, variable caps, and other items that I wish to survive now have a chance wrapped in a paper towel.

Odd size boxes that don't stack well are a thing of the past.

72, John-N5INZ

Date: Tue, 25 Nov 1997 12:33:50 -0500
From: "Bob Kellogg" <ae4ic@nr.infi.net>
To: <Scottae4vq@aol.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [31303] Re: Ideas for multiband rig
Message-ID: <199711251742.MAA23044@mailhost.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Scott,

Yes, I have an idea for a good multiband QRP rig. Buy a Sierra Kit! Mine works all bands from 10M to 160M and I can change bands in less than a minute. Has a digital dial, power meter, keyer, (KC-2) RIT, Variable bandwidth filter, superhet receiver. What more can you ask for?!!

CUL,

Bob Kellogg, AE4IC, Greensboro, NC

Prolably, but not nececelery. -- Benny Hill

> Anyone have a good ideas for a reliable QRP-multiband rig ?

Date: Tue, 25 Nov 1997 17:44:45 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31304] Re: What a night!
Message-ID: <347B0E8D.3F53@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I heard jess at 0159 too! I thought, what guts!

FB job jess!
-Ed

P.S. All you Doghouse sprinters in AZ/TX were very loud here! I was running 5 watts, using my 40 meter dipole on 20 meters. Obviously the lobes start hugging the wire on this second harmonic so I had trouble going east, but you south/East guys were reciprically strong here too!

17 measly contacts for me. I had a lot of fun, but boy I can't keep up with you experts. Seems I always have a run of 40 or 50 minutes w/o a new contact in my logs at every contest.

P.S. One QRP-ler is sending me a fixxer-upper Bug! I can't wait! Woke up last night dreaming about the thing. I was showing my son how it worked and get a new weight for it; clean off the white-corrosion.... Then I woke up.

Bed bugs.
-Ed

--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8,OHR-100, Pixie2, Johnson Viking II, Drake TR-3
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Tue, 25 Nov 1997 09:45:05 -0800
From: Bill Todd <bill@techline.com>
To: qrp-l@Lehigh.EDU
Cc: nwq-l@scn.org

Subject: [31305] 15 meter QSO's-update
Message-ID: <1.5.4.32.19971125174505.00703430@mail.techline.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hello people -

This is really fun! The old HW-16 seems to be working OK...and I was able to get right on 21.050 thanks to a QSO with Ray, W5XE in El Paso, TX. It's kind a hard to get "perfect" with an old analog dial (hi).

Ray and I seem to have some kind of "pipeline" between here and Texas. I've worked him on 80 (last night on the NW QRP Club Net), on 40 meters, (where we used to have the Net years ago), on 30 meters (10.123), on 20 too during numerous contests over the years, and NOW on 15 meters. Maybe we had a QSO on 10 meters as well...but I don't recall. Don't think we can make a go of it on 2 meters FM...but you never know.

CUL, Bill-N7MFB

Date: Tue, 25 Nov 1997 17:48:34 +0000
From: Ed Loranger <we6w@qsl.net>
To: bcutter@teal.csn.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31304] Re: Norcal paddles
Message-ID: <347B0F72.3E4D@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Excellent advice Bob!

Also, if one of your buddies has an old 'Dual Sanitronic' Kirby vacuum cleaner, they came with RED and Brown polishing compound for the buffing wheel.

The USMC sold us a 1 oz. brick of jewlers rouge for our brass work, and I have half left from 1976!

After getting an old Kirby Vacuum cleaner with all the trimmings, I discovered the buffing compound was jewellers rouge too! Now I have probably enough for 20 lifetimes!

So check out that old Kirby vacuum cleaner buffing kit.

-Ed

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8,OHR-100, Pixie2, Johnson Viking II, Drake TR-3
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Tue, 25 Nov 1997 09:53:48 -0800 (PST)
From: Monte Stark <ku7y@sage.dri.edu>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [31304] Ade's post
Message-ID: <Pine.SUN.3.90.971125091526.17095C-1000000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

Read and re-read the post by Ade about verticals. What he says matches what I have seen in my 40+ years of playing with them.

I'll add just a couple of my observations.

When I put out radials I don't measure. I just step off about 1/4 wave or so. I fully agree with Ade when he said that the number of radials is far more important than just how long they are.

I mention this because I see so many people spend a lot of time and work trying to get the radials "just so" and I don't think there is much return for it! Just get out 40-50 and enjoy!

Second point in the vertical vs dipole or other horizontal antenna.

Most of the antennas being used as a comparison are very low. If your dipole is only up about 30-35 foot on 40m, that is just 1/4 wave. You will still have a lot of reaction with the ground.

A yagi is nothing more than some phased dipoles. So a comparison of a 2 ele phased array with a 2 ele yagi should be "fair". With

the yagi at 70' at Don's house in Idaho, (KA7T) and my 2 ele phased array in the front yard about 1/4 mile away, the yagi ALWAYS beat the verticals.

This was farm country and there was lots of open country. Good near and far fields.

Here I have a 2 ele yagi at 85', A DX77 vertical at 30' and a ground mounted 24' pipe vertical with about 40 radials.

I have seen a couple of times when the DX77 vertical will have a station like the fox "in the clear" even tho the fox is weaker. This happens when the yagi is also getting a station from the same direction as the fox. Both the fox and the interfering station are louder on the yagi.

But in all cases of DX, the signal strength of the stations heard are better on the yagi. And I have never heard a stateside station louder on the vertical yet. Almost the same, but not quite.

Another little aside....the 24' pipe is close to full size on 30m. It is always louder than the trapped DX77 on 30m. On the other bands the DX77 outperforms the pipe.

I don't pretend to know just what all this means. I only wanted to show what happens when the dipole get put up in the air.

The observations with the yagi here at the house have not go on long enough for me to say that there will never be any conditions where the vertical will outperform the yagi, but so far I haven't seen one.

OK, back into my hole,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Tue, 25 Nov 1997 08:50:59 -0800 (PST)
From: Stanley Wilson <microres@crl.com>
To: boatanchors@theporch.com
Cc: qrp-l@Lehigh.EDU
Subject: [31305] FS: Vibroplex Book
Message-ID: <Pine.SUN.3.91.971125084436.3043A-100000@crl2.crl.com>

Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have listed "The Vibroplex Co" by William Holly on the eBay auction.

I listed it there since the last time I post a For Sale item on the list
I had offers to buy before I got my own copy of the FS e-mail from the list.

This did not seem fair to the group and those who got the digest, etc.
Also I do not like taking e-mail and then having to decide who out of a
group gets an item. SO will try the auction this time.

"The Vibroplex CO" by William Holly. My copy is autograph by him. It is
the First Edition and only 1900 copies were printed. Book is in Mint
condition. Contains History, pictures of bugs, and patents.

may be bid on at eBay <http://cayman.ebay2.com/aw/>
listed under Radio
Item Number is 2394940 (you can use there search engine for Nr.)

It will be posted for 5 days. Highest bid over \$35 gets it plus \$3
shipping.

Stan AK0B
microres@crl.com
-73-

Date: Tue, 25 Nov 1997 10:15:00 -0600
From: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
To: qrp-1@Lehigh.EDU
Subject: [31306] K0EVZ Fox
Message-ID: <M2285408.007.7rrj8.1.971125180924Z.CC-MAIL*/OU=LMPCC4/OU=ILBB/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Wow, Doc. I didn't think we'd pull it off. What a howling mob of fox hounds
last night.. In spite of them, I pulled you through with a 339 signal. Good
enough to take to the bank!

Some stations were stronger than I've ever heard them before, particularly NQ7X
and N6MM. I've got a theory about them. Suppose they just happened to have
pointed their antennas in the wrong direction? If it turns out they didn't work
you, maybe I'm right. Sure felt like they were aimed right at me. Headphones
practically jumped off my head. Then there was old Doc, chirping away just
above the noise most of the time. After we worked, the family hollered DINNER

so that kinda distracted me.

While waiting to work you, I did copy the following calls--K5OI, N7VE, W5FN, AB7TT, N6MM, W6ZH, NQ7X, NT3U, ?5WWW, WA9PWP and AB7MY.

Hope you had a howling ood time, Doc.

72, Bob N6WG and Ol' Kenwood.

Date: Tue, 25 Nov 1997 13:02:22 -0500 (EST)
From: NilsBull@aol.com
To: QRP-L@Lehigh.EDU
Subject: [31306] Argosy ALC line & 5w limit function
Message-ID: <971125130221_2072682970@mrin53.mail.aol.com>

Gang,

I was poking around the other day in the Argosy and started messing with the ALC pot on the RF/Mixer board (80784) where R3 is the ALC control. First off, I discovered that it's there to keep the p/s from tripping out when over 50 watts is run (which appears possible enough). Also, it does limit the output.

By turning R3 almost full-tilt in one direction, it's possible to limit the output to 5 watts pretty exactly. So, says me, thinking more or less logically for a change, might I be able to put in a switch to a pair of pots which would allow me to cut the output to 5 watts and thus not have to monitor the output? Rhetorical question, I know.

But I need that limit function, in my opinion, 'cause I wanna use the LDG QRP tuner and not fry it on the first couple uses. Limit to 30w or less, say the instructions.

So, since I have a batch of 4 pole, two position troggles that I bought off Roger at Midwest Surplus, I'm thinking of doing this:

1. Put the high/low power switch (presently a slide switch) on two of the poles, leaving that part of the RF set up basically the same as factory spec, 'cept for the type of switch.
2. Put an ALC limit function on another pole to make damn good & sure that the power never goes above 5 watts (which is possible with the driver circuit that gets used as PA in the low power position).
3. Figure a way to pass the DC feed to the high power PA section through the switch and thus discontinue the 4 A of idle that the high power section

draws even when it ain't bein' used in the low power setting.

Right now all I gotta figure is how to put the appropriate limit voltage on the ALC line to keep the 5w limit, for want of a better term, kosher. Or maybe halal. Depends on your background. . .

And I got advice from one of the gang about putting the LDG tuner at the end of a vertical antenna so I'd have auto tune from 10 MHz through 30 MHz, which I'd thought of but had not taken seriously. Yet.

More fun with radios. I love it.

73

Nils

WB8IJN &c

. . . now, about them badgers eatin' wires . . . hmmm

Date: Tue, 25 Nov 1997 9:58:00 -0600

From: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>

To: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>, w6toy@pop.erols.com

Cc: ghanson@uts.cc.utexas.edu, qrp-l@Lehigh.EDU

Subject: [31307] Re[2]: 12 MHz xtal filters

Message-ID: <M2285405.004.7rrj4.1.971125180922Z.CC-MAIL*/OU=LMPCC4/OU=ILBB/PRMD=MOT/ADMD=MOT/C=US/@MHS>

Well, for myself, I'm looking at two different situations. One is to improve the 38S IF filter with two or three crystals at 12 MHz.

The other is a second 38S kit I haven't built yet, but that I want to put on 15 meters. Haven't worked out the crystal combinations for IF and VX0 yet. May have to decide what IF crystals would be best and spring for a custom VX0 xtal if necessary. Only time will tell.

Yes, I have the conference papers. Don't recall if FAR Circuits has a board for the test circuits, but would be nice if so.

72, Bob N6WG

Gang,

I resisted posting this when I saw Gary's original message, but now that there's a semi-thread, I feel it is necessary. At the Second Annual QRP Technical Conference (the conference formerly known as FDIM) Bill Carver gave a superb paper on the design and construction of multi-pole ladder type crystal filters. The paper covers the entire design phase PLUS how to tune

these filters for optimal performance. Also included are the schematics of the test equipment you'll need to build.

Along with the paper Bill gave us a recorded demonstration of an 80Hz cw filter built using these techniques. THERE WAS NO RINGING! It was astonishing.

You can purchase a copy of Bill's paper, along with copies of all the other papers, in a three ring notebook for \$22.00. The address is:

Bruce Muscolino
PO Box 9333
Silver Spring, MD 20916-9333

BTW, this is the technique I'm using for my 12 MHz filter. Funny how curious minds seem to end up on the same page in the Mouser Catalog! Also, what bands are you designing for?

73

Date: Tue, 25 Nov 1997 09:57:27 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "QRP-L list server" <qrp-l@Lehigh.EDU>
Subject: [31308] Foxes, paddles, &c
Message-ID: <199711251852.MAA29326@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Gang --

Yesterday was an up and down kind of day. You know the type. Badgers: 1, Chickens: 1. Like when the postman, er, postal carrier slips on your sidewalk as she brings you the Publishers' Clearing House Million Dollar Winning Check and sues you for \$2.00 more than the check.

Got an early start at work and had a few successes which were then offset by a few failures, but that's work, no need to worry about it.

I cut out early, but due to the joys of UTC (I'll bet Ade could write a book on that!), Doc's foxing hour was already nearly gone. Turned on the radio to warm up while I put away my coat and briefcase. For some unknown reason the headphones were unplugged and the volume was way up, so, as the radio came to life, I heard clear to the other side of the house, "QRZ Fox de k0evz". No tuning needed. Zero beat and all. So I settled down and listened for a few minutes to catch the swing of things. Doc was 449, maybe 559 on QSB peaks. Put my call in once or twice and thought I heard

it returned, so I sent my exchange, but so did someone else. I wasn't sure if I got it right or not, but missed Doc's response under the QRM. Figured I would wait until near the end and try again, just in case, but his signal slowly slipped away like the setting sun. Had to settle for a short QSO with a gentleman who has been a ham since the very early days of radio.

What with dinner and harmonic homework, I didn't have a chance to get back to work on the NorCal paddles until pretty late. However, I had done the hard parts the day before, so all I had to do was assemble the pieces. Went together pretty easily. Did you know that it takes three different sizes of allen wrench to adjust these things? That's three trips to the toolbox in the garage. You know, scratches and all, it looks pretty good! And I built it myself!

Even though it was past my bed time, you know I had to try 'em out. I remembered how I used to work 40 meters when I was a youth. I would slip down to the basement after everyone was asleep and work the world in the glow of the dial lights. My first African DX came that way on 40 meters. Anyway, I turned the rig back on and connected the new paddles. I started tuning up from 7.000 and heard KH7/K9Z0 working a whole stream of 5NNs at 40 wpm. While I listened to the pileup timing, I checked out the paddle action at 40 wpm. Not bad! So I turned the xmit on, dropped my call in, and got my 5NN K1MG! Not a bad way to break in a new set of paddles, eh?

You know, those polishing scratches kinda sparkle in the glare of the desk lamp late at night, when the Pacific skip drops in. Not bad at all.

It was an up and down kind of day. You know the type.

72,

Mike K1MG

PS. The KH7 was one S-unit stronger on the vertical. So it goes.

Date: Tue, 25 Nov 1997 13:06:04 -0500 (EST)
From: KB9RPD@aol.com
To: qrp-l@Lehigh.EDU
Subject: [31309] What is a Fox hunt?
Message-ID: <971125130603_1272371314@mrin83.mail.aol.com>

I want to thank all of you who submitted your responses to my post to the group and to those who emailed me personally. I am appreciating this hobby more every day....I have yet to find anyone who has not been helpful to the beginner!

Everyone seems to talk a lot about a "Fox hunt". In the traditional "hunting" application, I understand a fox hunt. But, in a QRP application, I am kind of in the gray area on this one.

Please tell me if I am assuming right...someone is the "fox". They transmit CQ's and their call sign on a frequency on a predetermined band. Everyone else tries to find the fox (the hounds) and record QSO's with the fox. Is this it in a nutshell, or am I somewhat off?

Also, I have had a stroke of genius...but, perhaps someone else may have already had this stroke of genius. I recently found a program for Windows95 called "MRX." The author of the program gives instructions on how to connect a keyer to an RS232 port on your computer so you can practice sending code with the MRX program.....

What about a step further...why not have a program that allows you to send code over a network or the internet so you can practice sending with someone else ... such as over the internet????

I am sorry to say I am not a programmer...so I cannot bring my idea into reality. Does anyone know if this has been done?

Thanks

73,
KB9RPD, Ted

Date: Tue, 25 Nov 1997 10:09:59 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "Robert Sorge" <rsorge@phoenix.net>
Cc: "QRP-L list server" <qrp-l@Lehigh.EDU>
Subject: [31309] Re: Interesting phenomenon: vertical vs horizontal antenna experience
Message-ID: <199711251904.NAA30106@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Bob --

Well, I found out that each type of antenna has one factor which controls performance.

For the horizontal antenna, the height is most important. Horizontal

antennas lose effectiveness pretty quickly as the height drops below a half wavelength.

For the vertical antenna, the ground/radial efficiency is most important. Vertical antennas lose effectiveness when the radials are too few and too close to the ground.

It seems that the more attention paid to these key factors, the more successful your antenna will be, vertical or horizontal; copper or aluminum. This seems to be the one consistent theme of all the reports in this thread.

I suspect that if you raised your G5RV with an effective height of 12 feet up to an effective height of 38 feet like mine, your results would be the same as mine, where the vee is about 1 S unit better than the vertical, 90% of the time.

Interesting stuff, eh?

Mike K1MG

> From: Robert Sorge <rsorge@phoenix.net>
>
> Mike: I have a Gap Titan also. Recently I put up a G5RV mini a boutt
18 ft at
> apex of inverted vee. I found the Gap to be about 1 s unit better than
this
> simple wire antenna on 40 meters. What have you learned about your
antennas
> performance?
>
> Bob

Date: Tue, 25 Nov 1997 11:22:04 -0700 (MST)
From: Paul Harden <pharden@aoc.nrao.edu>
To: qrp-l@Lehigh.EDU
Subject: [31309] Solar Summary 11-25/M1 flare
Message-ID: <199711251822.LAA26115@zia.aoc.NRAO.EDU>

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 328 ISSUED AT 2200Z ON 24 NOV 1997

SOLAR ACTIVITY BECAME MODERATE.

AN OPTICALLY UNCORRELATED M1 FLARE OCCURRED AT 24/1950Z.

^^

Means the flare was not seen visually, but detected at other wavelengths.

OLD REGION 8103 IS DUE TO RETURN AT THE NORTHEAST LIMB IN ABOUT A DAY
AND A HALF AND THIS COULD BE THE SOURCE OF THE M1.

This is the active region that caused the large flare 2 weeks ago. It
has been on the back side of the sun, and due to rotate into view soon.
An M1 is getting large, so this area could cause significant disturbances
over the next two weeks while it faces the Earth.

REGION 8108 (N20W65) PRODUCED A C3/1F AT 24/0400Z. THIS REGION DISPLAYED
DECAY AND CONTINUED REDUCTION OF MAGNETIC COMPLEXITY.

The first clue that an area on the sun is capable of producing disturbances
is the complexity of magnetic fields. Magnetic field lines runs between
sun spots and sun spot groups, and as they start to get complex, a
disturbance can occur. When these magnetic field lines start to decay,
the region is dying and (generally!) presents no further threat.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS
FORECAST TO BE PREDOMINANTLY QUIET FOR THE NEXT THREE DAYS.

The M1 flare detected above was not visible to the Earth, as it is just
approaching the limb of the sun. Very likely, this means the trajectory
of the electrons that cause geomagnetic disturbances probably goes off
who-knows-where and NOT along the ecliptic to hit the Earth. Thus, this
M1 flare probably won't cause much effect on Earth. (famous last words!)

IV. PENTICTON 10.7 CM FLUX
OBSERVED 24 NOV 103
PREDICTED 25 NOV-27 NOV 103/107/105

Hey, the solar flux is still looking great.

PS - I just finished writing part 1 of a 2 part article on solar
disturbances with a good description of the physics behind a typical
solar disturbance with some cute illustrations. It's "in the mail" to
Ron KU7Y to appear in the next ARCI QRP Quarterly, for those interested
in the solar phenomenon.

72, Paul NA5N

Date: Tue, 25 Nov 1997 10:17:45 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "QRP-L list server" <qrp-l@Lehigh.EDU>
Subject: [31310] NorCal paddle polishing advice
Message-ID: <199711251912.NAA30558@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Lots of good advice and shared misery coming in from the metal mavens.

To summarize:

The automotive polishing compounds may be too coarse for government work.
I should try to find Tripoli and Jeweler's Rouge.

A Dremel tool is a must to avoid the Texas Chain Saw Massacre effect (tm).

And serendipitously, Tripoli and Jeweler's Rouge are available from Dremel.

Now if this isn't justification for a new toy, what is?

Thanks to all for your help.

Mike K1MG

PS. Dear Santa,....

... and chickens, too.

Date: Tue, 25 Nov 1997 10:29:30 -0800
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: qrp-l@Lehigh.EDU
Subject: [31311] Stainless Steel Contacts for NorCal Paddles
Message-ID: <3.0.1.32.19971125102930.00ae08b0@dpol.k12.ca.us>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Danny -WX4P, asked yesterday about the use of stainless steel contacts and he mentioned that he recalled a posting to qrp-l about it. Yes you are right. I had Doug Hauff post to the net the query about using stainless steel for contacts, as no one knew that he was involved with the project and we didn't want to give it away at that time. The consensus was that

Stainless Steel at QRP levels would work just fine for contacts. So, we made the decision to go with it for the contacts on the paddles. If you want "silver" contacts, get the set from Jim in Alaska, and use a 4-40 brass screw in place of the stainless one provided, and simply solder the silver contacts on. A lot of work, but you will have "silver" contacts. Are they better? I don't know. I have not heard of anyone having any problems with the stainless steel.
72, Doug, KI6DS

Date: Tue, 25 Nov 1997 13:26:55 -0500 (EST)
From: n4js@pobox.com
To: qrp-l@Lehigh.EDU
Subject: [31312] FOX: Ruminations
Message-ID: <XFMail.971125132655.n4js@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 8bit
MIME-Version: 1.0

Just KNEW ol' Doc would make as good a fox as he was a hunter. This hunt proved a point (to me, anyway). Us East Coasters HAVE to get in there early! I listened after 0030,,and Doc had faded to nothing! If I hadn't gotten him right at the beginning, would have been S.O.L.

For the Western (AZ and CA) foxes, need to wait for the band to lengthen out, but still have to penetrate the "Texas Curtain."

It's tough, being an East Coast Fox-Hunter!

Enough whining, back to work on the GQ40.

Sent at 13:26:55 on 25-Nov-97
John L. Sielke n4js@amsat.org n4js@pobox.com
n4js@qsl.net NJ Grid:FM29LN
http://www.qsl.net/n4js NJ-QRP #57 QRP-L #884
QRP-ARCI CQC #443 CQrp #50 AKQrp ARQrp
NE-QRP #507 G-QRP #9544 NorCal #1989 QCWA FISTS #2781 ARS #243

Date: Tue, 25 Nov 1997 11:34:14 -0700
From: "Steve Hurst" <shurst@magiclink.com>

To: <qrp-1@Lehigh.EDU>
Subject: [31313] Mysterious Jewlers Rouge
Message-ID: <199711251832.NAA148892@nss4.cc.Lehigh.EDU>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Maties,

AAARRRRR, where might a bloat such as me self find this "mysterious jewlers rouge" ?? AAARRRRRRR what would be its brand name ? AAARRRRR, would it work on me pieces O' eight as well ?? AAAAAAARRRRRRRRRRRRR.....

(somethings in my coffee this morning !!)

73,

Steve Hurst

KA7NOC (southern Idaho)

<http://www.magiclink.com/web/shurst>

shurst@magiclink.com

Date: Mon, 01 Sep 1997 16:01:23 -0400
From: Richard Powell <ripowell@mpna.com>
To: qrp-1@Lehigh.EDU
Subject: [31314] Re: BUBBA Pics!
Message-ID: <1.5.4.32.19970901200123.006aa8ac@smtp.mpna.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Believe it or not, I got my pic's developed also, but will only subject the world to one of them... <http://www.mpna.com/ripowell/bubba97.html>
/rick

At 10:30 AM 9/1/97 -0700, ki7mn@dancris.com wrote:

>Jay Miller WA5WHN has sent me a couple of pics of his BUBBA site. They are
>on my page at <<http://www.dancris.com/~ki7mn>>, under the BUBBA PICTURES button.
>

>Should be more coming soon (I hope).

>

>

>73,

>Bob, KI7MN Chandler, AZ ScQRPion QRP-L #271, NorCal #1228, CQC #274, QRP

>ARCI #8918, AK QRP #30, not in any order of importance.

>33.334500N -111.87260W

><http://www.dancris.com/~ki7mn>

>WIMPS: QSO's=19 30=19 17=0 12=0 States=15/0/0 DX=0/0/0 QSL's=6

>

>

>

>

Richard Powell WB6JBM TENTEN - 13044
ripowell@mpna.com <http://www.mpna.com/ripowell>

Date: Tue, 25 Nov 1997 11:55:55 -0600
From: "Claton Cadmus" <aplitech@spacestar.net>
To: "QRP-1" <qrp-1@Lehigh.EDU>
Subject: [31315] Norcal Paddle Magnets
Message-ID: <199711251833.MAA09116@webster.spacestar.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

I saw a message about "hammering" in the magnet in the Norcal paddle kit and it made me cringe. Here's a tip, place the magnet in the freezer until cold, hold the brass piece with a pliers and heat it over the stove or with a propane torch around the hole. When the brass is dull red, insert the magnet with another pliers. You must be quick and get it right the first time, it should slip in easily. Careful you don't burn yourself.

Hope this helps.

73 de KA0GKC Claton Cadmus
E-mail cla@spacestar.net
If you live in Minnesota check out this webpage!
<http://www.qsl.net/mnqrp>

Date: Tue, 25 Nov 1997 11:38:18 -0700
From: Steve Galchutt <n0tu@webaccess.net>
To: "\"Low Power Amateur Radio Discussion\"" <qrp-1@Lehigh.EDU>
Subject: [31316] RS Headphones Nova 43 or 44?
Message-ID: <347B1B04.2FD2@webaccess.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Awhile back ago someone was raving about the RS headphones but I can't remember the #. Was 43 or 44? Tks Steve.

--

CUL Steve/n0tu . .
Solar powered QRP/CW
Monument, CO.....email:N0TU@webaccess.net

Date: Tue, 25 Nov 1997 18:41:04 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31317] Next NORCAL Meeting: Hitchhiking?
Message-ID: <347B1BC0.6CB0@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

QTH Santa Rosa, CA.

Is there anyone going through here on there way to the next NORCAL meeting. Am hoping for a ride.

Would like to share my:

Norcal Paddles.
RF Sensing sidetone.
IC555 CMOS Keyer (Non-Iambic).
Maybe my pixie2 on a board With screwed on Boxes holding xtals.

Except for the Paddles, everything else is definately UGLY construction. But all work FB!!!!

Ride?
-Ed Loranger

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8,OHR-100, Pixie2, Johnson Viking II, Drake TR-3
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Tue, 25 Nov 1997 23:42:51 -0700
From: gsurrency@juno.com (Gary Surrency)
To: NilsBull@aol.com
Cc: qrp-1@Lehigh.EDU
Subject: [31318] Re: Rodents ate my linear!
Message-ID: <19971125.234257.3526.0.gsurrency@juno.com>

Nils,

After I fell off my chair laughing, I looked again at the Subject line. It sounds like a headline for one of the check-out line's tabloids. Maybe you should call them and see if they'll print your "story". ;-)

Thanks for the humorous diversion. I don't think I can top that story.

Well, maybe the time we had a skunk living under the house that wouldn't leave. I finally set up an electric fence in front of one of the crawl space vents where he would come and go at night. I charged it with a voltage quadrupler using an electric fence unit, so it had about 8000 - 9000 volts DC on the wires. When the skunk hit the high voltage, he let loose with his musk and never came back. I had hoped to electrocute him as punishment for smelling up our house for several weeks, but he somehow survived.

Ah, the pleasures of living in the country in Florida. Armadillos, skunks, opossums, squirrels, rats and mice. A virtual zoo.

PS. We had no small children or neighbors, so no one was in danger of electrocution (except me :-)).

72,

AB7MY

Gary Surrency

Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions, ARRL VE

Date: Tue, 25 Nov 1997 13:48:12 -0500 (EST)
From: K5BDZ@aol.com
To: K5BDZ@aol.com, qrp-1@Lehigh.EDU
Subject: [31309] Milliwatt Journals Sold
Message-ID: <971125134811_1660438171@mrin40.mail.aol.com>

Milliwatt Journals sold with two back up offers.
Thanks folks for your interest. These little jewels are really fun to read and have some great 2N2222 ideas!

Bill, K5BDZ

Date: Tue, 25 Nov 1997 14:08:08 -0500 (EST)
From: "Phillip S. Rutledge" <rut@mcrut.mv.com>
To: qrp-l@Lehigh.EDU
Subject: [31309] SGC SG-2020
Message-ID: <199711251908.0AA12954@mercury.mv.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hello all,

Just got off the horn with SGC and got the straight scoop on the "non retrofitability" business where describing the optional battery pack etc. It seems there will be a "field" version of the 2020 offered somewhere down the road which will be configured to accept the battery pack and front panel cover. Thus, the "standard" version will not do so. This is not to say that the battery pack won't work with it, it just won't be attachable in the same manner, nor will the front panel cover work at all on the std. model. The good news is that the radio itself (i.e. inner workings) will be exactly the same. I might add, the price for this new "field" version complete with the two items in question is expected to be over \$1,000.00. Incidentally, this "field" version is being created mainly for the commercial market in Europe. (non-ham related communications) While I had him on the phone, I also voiced the many complaints about the lack of a microphone for the \$595.00 price, and he (Bob Gregg) agreed. It seems his recommendations to include same fell upon deaf ears within the organization. Being as how they have a "commercial" mentality, they don't know just how the parsimonious mind of the average amateur works. :-) His understanding was that the price would be \$29.95 and was surprised to hear I was quoted \$49.95 from Universal. I said at that price I'd be better off picking up a used Kenwood mic at a flea market.

Initial shipments are still set for latter January. (maybe...) hi

73-- Phil (K1HS)

=====
Phil Rutledge--K1HS-- rut@mcrut.mv.com

ARCI#9265=Norcal#1797=QRP-L#820= CQC# 385=FISTS# 3317
=====

Date: Tue, 25 Nov 1997 14:15:25 -0500
From: Bill Howell <bhowell@mail.utexas.edu>
To: qrp-l@Lehigh.EDU
Subject: [31309] Re: I need a QRP-L Number
Message-ID: <199711251915.0AA08760@nss4.cc.Lehigh.EDU>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

John, KF4NJ wrote:

Hello All,

I have been reading the messages on this reflector for about a month and would like to join QRP-L and get a number assigned to be a bit better prepared to work those foxes! Who do I contact?

John, If you have Web access, go to:

<http://qrp.cc.nd.edu/QRP-L/clubinfo.html>

and click on "Get your QRP-L Member Number". A number will be generated and emailed to you.

There is another method to get a number if you have only email, but I don't have that info right now. If you need it, I will look it up.

Bill Howell
University of Texas at Austin
Performing Arts Center
Electronic Maintenance
N5ALO QRP-L #415

Date: Tue, 25 Nov 1997 15:19:36 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@Lehigh.EDU>, Laurel ARC <larc-l@webtrek.com>, eax@w3eax.umd.edu
Subject: [31309] Now that sunspots are here again...
Message-ID: <Pine.LNX.3.95.971125145911.21954A-1000000@w3eax.umd.edu>

MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

The phrase "WFWL" comes back into play.

DX Hounds like myself have been held largely silent for some time while the sunspots haven't been anywhere to be found...of late, 15, 12, and 10 meters have even awakened.

I even heard 5A2A this morning, and DU1SAN Friday evening.

(Libya and the Phillippines)

The phrase "WFWL" MUST BE TAKEN AS GOSPEL.

Work First, Worry Later. DX tends to bring about people who somehow perversely enjoy ruining legitimate enjoyment and achievement of others, and somehow taking advantage of their trust. These people are often called pirates. They even know CW. Some call them "slims."

Hear a rare callsign? "Work First, Worry Later."

Best of DX to you all! See you in the pileups!

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 80 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* Charter member, Maryland Milliwatters * W3-VK on 3w mobile CW *
*** 301-549-1022 h / 301-982-1015 w ** Life is one big hamfest ***

Date: Tue, 25 Nov 1997 13:19:24 -0500
From: "William F. Nicolson Jr" <n2wf@erols.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31310] NorCal / K8FF Paddles
Message-ID: <347B16AC.4D156DB9@erols.com>
MIME-Version: 1.0
Content-Type: multipart/mixed; boundary="-----AF99D97BC0A2B250F000DBC3"

This is a multi-part message in MIME format.
-----AF99D97BC0A2B250F000DBC3
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Guys, I have been working on my NorCal Paddle kit on and off for the last

month. I decided to redo the base and replace the stock 1/2" steel base with a 1" brass base. the screws need to be changed and I intend to invert the plastic handles (turn them down) to compensate fot the 1/2" gain in base height.

Here is a JPEG picture of my modified NorCal / K8FF Paddle Kit. The Base has a flat finish from sand blasting. I'm trying to decide if I should re-sandblast the base and put a clear finish on it, or polish the base like the other brass parts.

```
-----AF99D97BC0A2B250F000DBC3
Content-Type: image/jpeg; name="paddle2.jpg"
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="paddle2.jpg"
```

/9j/4AAQSkZJRgABAQEAKACQAAD/2wBDAAMCAgcMCAgMDAwMEAwMEBQcGFBCQEBQoHbWYIDAoMDAsKCwsNDhIQDQ4RDgsLEBYQERMUFRUVDA8XGBYUGBIUFRT/2wBDAQMEBAUEBQkFbQKUDQsNFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBT/wAARCAHgAoADASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqO0kpaanqKmqs00tba3uLm6wsPExcbyHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwDgsYAxn8KU8Y9+MDtS9V+h/u804jn860SsdHMNJ9/zOu9Qt02fn2qbbn3xRqQ0U5B7gVKpwaYUHzDv1qRv73t2pcoroNpxx909/elVCMbm/OncPPSpabdilZgi5XG7NSr99aEXI+tPH3u09Q0J6B+PtTh070AfiCalAAPcnbs32Aavy9DmpOh+tIBv6dqftz/SgBEHvz/Kn+3J+oo8snPpUgGaVwGY79Kd16fqKcfvClxx3NSAuNw7f40uD3/Klp+2qsXzCDOP6U7PbpSbc4p2z2pWDmG9R3p2PejgFUU7GSe90xY0daeOmMmgYPX6807sAe/Y0m7gNPTps/8A6qfjr2zQRucj9KHcjmgfp2pw6VJs+77U3bgGkWHVjnr7d6NtKVpX+YoC50eKCOYbnseRjtTtpce2ad24pce1Gocwykwce9PxyaXHPWgd77Dcd+cUbTu9aXp70pSgG7DCOnBpD97p+nSbfl/pSbR0xQ9Bcw0ryTx6fSkxzTsA4+9R/jQQR49M596THqak2/T8KQP9aqxfMR7Tjrz69qB14Jx2NSbfam+v5cUiBv1pGzmpCMUxlytIq7Bu/wDwm7aeV9KN3agfMR0Hr7e9OHSgjIoDmG8n/wCvRS7aTHHoOtAm7id+5pCcmm7Nw6GkKc96CRvf/CmsOGp5jzTWH4VVGI27jtTs4P44pxWm/dHeiwCY4xUZ+WpsZ5pgTn0qUK5G2ecdfe02+Y4yef0qYr1/mKbs+b+6e1WMgI5zk/jTWGG7ntkvNjJ/zxULjaOB+LUAMI3mmfdqZ16VGy+2BV8oEJ2478n0PMH8Key4HH60MuaoL9iBucd6Qqd/Tp1FPx9fT6U30T09s5oF1IW5x30aYTx/U1NgDk/rUf17e01BFivjPvzTd3Xvn1qvuvOR/OLYBSevrngLLTcS0/X86ZwPu8d+lT5PhykY+bd0qPaoIHZPPNBUXcik+frUTjGKS24JqDse2KCblv5Vx1PpipWG0jk07nH8X86kag0IXWlaevr3PfTt/zpcEn8aBN2F2bTuFS7d1EasB1bnvT4/mpJWGIv543VKnpSbevP51Iq/P/AI0nzGgznpzUm0qD7U4D5h6+tPgC/wAVQGDHz4pyDFKB+HepMfMaOlGKu31z7U9Y+etOVcfXOp2No45w01LmYDMcZqQ+3X9Kds4

psh8v8aYD1FP/OkGc/8A1qeBmgBq+/WnEYp3b1Wl289aAGY9qVV+X/GpNppVT7vp71fMXzDQ
mD/vd6A0f547VNScScsrhyjaUjLGpKXoap6CSuMxu96cFp38V0PXrU3vuIiGcf/r0bPmp+2nD
jHBouIYVzQF4pyjpmnbe0104DAvP+9RjPvzT+ne12+9MCPByKH+9Un8HFKVIqAIj94U7ZS44
9s0p90aNS+YYQM0mPwP01001AHPX86qxAzGeeKaFz71IFyaTbUgR7cN/QubdxqQjI/Wl6imM
g25yT/8ArpuxemKsN+VN9+38qQiHbj6UvcfSp0vTHrS7MGgCDv8Azox61LQRz/nmga1ISp//
AF0Yz+NT43fj60gX6D/eqriIG69fwpNvtUrDFIwwaLgRbc/Wm9BU7daZt56duaYENHU1Jt68
H60fx9vxoGnYjxn3o29afyaTuaBDG9qaRmpXGDTWT5avmAhZfT0phG4dDj/a4qwy800jNHMB
C30qIrrzznr34qww4P86Rl3AjPH8qdwK31H+NM25HerDDJxxim7ecZbmmBWK5+1MKdeMcdc1Y
bru6eoFIy4/vetAror7TTCp8ipwM+tJJjd2oFy1Vlk9eaiC+lWyMN7VHJ1x+P1oDlKxXax44q
Ir/ntVvbhun1NRSJ1J0KCCs/J5/CmyDLc55qyQWfoMGoun00/wBaAK0i/hTJBk47VZcevc/W
onTH1NA7l5srz8tPIpVX5Rzn/AHKlCjj196DUikXbjrR5eWz2qfGT+nNL5fzdKTdhDT39fWnq
oVm296dnAHr0qTZ81MLhj7Ypxj5FPcc9z/KpB9P/rGklYBqjPp1qTb70kZJx09z61Kq/X6G
k1YBAN3Hr7U/+KnFaVePwqdAuIFp1Pvg9sUbOnWkAmQePbvUcmCtS7MN6+9AX0a0bsAQnKA8
VLtx9faoo0h2jNWSYG2swE257BaAuT/Wn4yeads+nRQAw/eWnU+l2C1oAxVx604L/d7dzT9p
xSeu7BX1zSbuA3ad317U5eD9BTtn0zT8cU7ARfz6U8/L2p2369MUtSBH/FS8f/XqTG/GKULj
/wDXQBGVHJ6Up5bj9BUmz5uP5UpUEc/rQBHs+b/69IB1+X+tTbB6UhXpQBEF9vxN0x607Y0v
elK0AR+v+GaAuN3rT/uJvS425x1oAjzn+L8qTbxUrCjbQBEf/wBdNxxxy1TY/wD1tTce/wCd
ADC0fpzQF/WpP4qCuT6+5oAj9c9/Wm4/4FU4Gaay/N7+tC1AiwdvNIVx3NS70ePm74NBtNpR
ok5ERNikKf48VKQCeOxtupFUE/X0oGQDknBwmKfjnNPaz1/HFIBx7mncBjAf/rphTNT70ab
SAhA596NmT/jUpGaTHNArkJXmmbfpu5XFM2/N0rSwyIrr/Wjbx9f0qQr+P1pP4qQDCuTTDyM
9fpU22onxV8oDCv6U0ipWAH+NNx/k0coEPG6g/rTy0T1oI4NHKBD1PUU3r710yc0zbkHj8q0
YCAj680wj7J5HerHXk9PSm1MVVwK7x5PY0xk9qsY57NTD83HSgV0VyyX+dROMGrZTNQ1Msf8
aEMrhep7HuaYRj1q1t8w8fTFMKZxQKzKxX0etREbt3H0NwCoz90Kj7n0HegmzK5X2/LtUTE
1WmXac4JHTNRbe9BjBc+35U5VzThx+N0I9c1ktDZu4mPwo2A9aeV9ua1UbjWtxDVQe/PvUu3
JI6G18sN759Keq8dc445pWAYF+Q5wce1Pub06Pt9604H86nC59RQ3YCJQ0n5VNsW3Hf1owOK
f/FRyGKvNLS9qPu/TtT6XKAbetLtwetPzuzTimfT8amyAiI3fSnDg9GqRl4PWjHJI3fjRZAR
KcS/WrXr3qsQ0CatqNx44quUBpjyPenbMmpNvSnba0YCLzTuM+9P8u1CbJ6VLdwI1XA6cfW
njPTGee10C8Yp+3q0fxpAMwV/wB61Iyen50/bkUvTjP50rAR7ee90IxT2G7pzn0pSBRYCHHz
9PxqTa0KdtpQuakBnVqXZ7U8DNLt5oAaMmmE4FTYz3NDIapsZCQMfyoCk9Kmz70uz60XEQ0u
30TUn+eKT86kCLbmFRmpSMUv41VgK4Tr1o21L74NLjtRcCBunF053evvUu0MUbcHrUgQHr
il2GpAmP8aNP4oFYh2ZPSk8vn3qc/TvSbaqwWK/l8deg7UrDYvU1PsFBXFPmGV2Xk/zo25x6
1N/F1oK1LVgIXGDTa12fWkx+XStQIdnPFJU7CmFc98UmrGyEjFMqfb19fakPLdvpQ9NgIdv1
pnU9cZqU/TGTSdSM9qAIZw0P0pufrzUpWm7Pu8D15pcoEJ5Xt9QaaYwT61L5efbmgjPalzCu
RbIk6Cm7an8vn2oKg+taJkPtpSbdtTmIE9M+/pTLPp+NAEW70RTa12/y/KkZdpAoAgbpTWU
1Pt9abs+tAFY898VHs56fjVp1qIru65wKBJWku0Z/WomA7fhVzH+RUTL1ewPv0oCxARuP0fy
qF149sVbZAe/5VEV54XrQLlKhGKjYKB6VcaPPH60zysEfniggsCPd901P2/njpQF3VKsXT/G
p5TUjjfSquWPzNz+lGzp/Spfcfj9DVAIiAH39a0g6fnT+cj360/ygfrWQEIBbFWgu7vQo64H5
U4LigBPLz14+tKEJ7VIOffftSqAc+nVRysBuwM0nFSJHz+FHvU20M1o3YYm0aXHzdP0p+3+d0
IxS5RDBHzTgn4+5qQDNG0bBjI/Ck1YCvOu1ScVNEdwzT2Xg0kFSwHhd10UBPanbeMfyp+3Gf
WnYBnQUoHNOxzUoWi4EYXOPWnMMdc04LhvT3pVT2bnvSAjAA7U/Z/wDrp+3bS4yeB1pWAiGc
UqpUwH5UB0ae2wEXvS9T1zjips5/woHrUAQYyfu/j6U8rntUgX8KTirAaR0zQF56nd/KpP60
v0P/AK1QAZbzSMMetSjvTdpoAZQVzipNtL5e0/7VNqWEIHFH5etS45FJt5oSAjIy340Y4P1
qQqfTNGPSkBFjik6e1T7aTbjp+tAEGP4jn6Ypwxj61KBx1pKbYEZT/8AXTdhqfbTdtUBF/DR
jn3FSEcdKTtzVgRed/8AJpMc1Ps+lIRmsQIGjz6UjdK15AHT8qa0nt7VfKBFSecdkmIx0ppB
qwIGTDdfemyfjU7dabt4z2qOUVi65wdp+tr8VZeLK+1M8sr7eho5RkF05zU2w7aUru7VYFc
jFJs/Kp3FMdeenTmnYCH88UhGal2im7MD7uR061N0K3ciK45zimMPn+vep9vy00IT15pjIWX
cOn4VGy4NWPJ3noaTyjnp+lUBXI9j6nNNKZxVo23b7xNNMfRfagCrtpG45wy5qwyY0uDimG
PPOKAKpTkcF/AF6aY/vZ/wDriXlCegfnTfLHbpQBUDmds+nFNMXP+cVb2Z7Uzyfn+50oApe

XkepprR+3tV1os5x+Rpn14/xoAQcev0qT5txHH40oi2njmpdvFRzARhQx709gx3f0p+2nBPa
rGN2CnJ83rQ8ZKntUka/L6UCDZj00tPVRmpQn4+1Cpt46UrgRhOpp3l/N659a1+8KkC8c0wI
zh8tKiipdn1p20c80JWATtS7Pm9fenZ28HjNSUirAMIZtgfFP2k1IFA/H1pgQ7firTixiZs1a
8in+1KIhuz/Op5gBRTtvFPCZoIzUAM6ZHPiXtTtSLx9acFzVMCL3/nT8DGacFzTtmTipAZt4
pMe3NTbcY/nSMvHf6UAR7eDTtvfnj3qcxA45pGiyP61fMBHs/nSBcjpx71MV3UzYAAoUBu0U
uz6U9hhloK47kVIEYXnPW1AD5qXb70oXBWP5VXKBew/Ghxz1z7VLt56fnSiPB68U0VtwIcbc
/wBK0vT16VNYf/xoC507dy0Kgd2Q9R3FHf1NTGPNgzd64FN0wiHucZHvRs9jUu00nTstKY+f
TNICEr+NIU5xUohJHv8ApTvKJHQ09AK+3/0aTY0/rVn70T9Kd5FLQehWwBSFMkVZ+zGk+y8/
jTbuIrbabj5sdKu/Z0c077Dnr9aQGceFx/FnpS7TWibPnvzQLDGOP8KBmYy5o2ZNa/2L14/k
KeLDca0uIxTHSGE4rZN1z2/GnLaDpgfjWVxXMPyMj7uPrTfIyeP5VvfZ8d+1GxExVWGYQt80
fZD/AJ71ubFXr+tM2j+6Pxq7oDG+x/X8aQ2XtWycZ6U3PzUuZBcxzY57UCw5G0x71qse0BzT
Qc/w1P0K5mfZRnqceH2Pp/WtEsV9fm96jfm9h3KP2MenFBtF0PerTZqIgA8d+9H0K5CbY
YxTfIX0PFT55xTDLz/WjnFfuV3iG0R+VNMT5z3ph/DNUUU3gwfvfnUbRHParM6ZT5c7h3qR
Yt/1qgMzyucfrQ0PuBwn9n//AFUjQc0GdzK8mozb59R71qNCMY/nTfIGaAuZbQ8d0fakeDFa
HlH/APXTTdt7UBczgM06nCPil8v1B/DmoUTUZs4qRI/WpPKA70/HTg1YiELkYqWP7361IE+f
v+NKICMKL9wF8v5qf3xUGX37/nTlGc7c80AMx/jTgvHrT9mDz34qQL065qW77AMC0tP+8Tj1
IOe1SbcjmnYCJo89x9DT1XjNKU+WnxD6/Wi4AFzxn8aft56U7ZzTwM+31pAMUetOCc1Jt9Kd
t+Wm1cCP+G12e1S+X6dxT/LqGrAQcBvfFSbdyLgVKq980/yvfdQ1Yct5fSn4+Y/0qwsJDY60
42/Pfn0obAr7ecbT1+opVXDh71WRBx/jTvI+tUBV2464pQoBP5Yq59139uKd9jzxrZrAUgtJ
t3H/ADxWh9m4p/2PNS1YCh5Zpv1nd6g9q0/sWef5U8WeD0pAZIjw3Q89zT/KL+v4VqfZKeLX
igDK8n5qPIz/AI1sfZxu60mxdvrSuBleRx3xSm20K1dqfi09BVf7vX+dFwMVLc5PUmrP2Xir
oAPb86k0RiquBniy54H196f9j0fu1e3Hd3qMsT61DdwK4tM9eDTvse0YqYtlcc0wjJaQ5kMZ
91XPpT/s64607HtSP7UrieKR++Kb+7Xn+1B0TTSM80+YG7Enyge1Idv/AOumE49aGcIhYnb7
mo5m0w8nkUwt29KiivILh2WKVWI9+afnmjUm4u/Pembt5+nrs598Ux+107B6CtXQeD7Ujd6Q
90tIQ1jz9aZ/nmnP+NNIZQAjncfSk6mg9f8AGkIX60AMP1/0mZ4/xqTGc1G2P1p6AMY59qY3
0f7p/Cn/AHsdaYSD/wDXobu04zf8/wB2m9T+nNK7bh3prY/OkFhp4bPPSmk9K0nb8qaw31V2
K40mm5wfpQcfSmN/nNVbuVYRv8mmNnN00D759aQ88fzpcwrkbf+nehZvIl/eE7Gxg+9K/Wo
3G75e3vVrQLGicdaJ5PFJC+5PepGH8+tUZld/8A9VRv96pnPPtUMnzf/Y0AQuDn+tRt6d6n
frULf5AphbsVfJ3U7yj61ME5608xc+1Qk0ak0w0/b81SeV9M08x4o5QGLHupfL+f2qcJjof
zqZYW50PzqgKyLt/pUhGatLDntj61Ktru0B3/OgCoq7jzTtu41fw29BUotsjilfuBQ2ZPqPe
nbCPpnPNaP2P2NSi05xj2p3AzDbk9KEtmFa32T/61RxxWyh9v6mp5QKwtf8il+zZ5/DmtTyg0
M07y029fmbh3Qgd9jJxUgtvwrRAjNODIG9/eiz7gUVtcE/yqQWnt+VXBIC33Pzo875ugo5kF
yv8AZqkFnx061L5vNOMh/wDr1N0FyP7Jz6U4W2RQ7k4560hz3BxQ5JjHiIY6/hThHGrdetR7
iTTt1LmEO+SjjeVULTfxozketHMBJv56UnmnjgU3PzUbu01QA8yZDD9aaZD603cKT7xo1G03c
9TSD8f8AC16/WmNyeuKBE03rTQMCm7sfjTf60XHYlpG6Uzdzik6mgQ45/H3ozu0egzSbqTp
7GgBM/1Rv+tI1GfmoAVu1IOo6/jS8bqQkr60AB5Wkpu/tS9RTegXBvnFMZDnnj6VFc30Ngv7
1+v8PesS41p79ikSkL7dTU3D1L2p+IIN0UjJkfpGvYd5e6p4m1Ii3bM/dBwAK2ovDv2uVZbg
bV64zW7BbR2kWyFFVahK5pZR0PXRg8PXdhI0v72SXayjpXbt/FXP+KeY7I/3Z1rfJBpb/gNW
tNBSdxrdaWmy0sK7pGCL6tWFdeMrSGT5Vdk6FhTuZ2Zut1FFVbW+ivrcTQtvjjarDdafqFxP8
9aY345pfwo3UheBz/wD1U2nN0pm78aAEPPXGKR16cdKUKmkY+uaAI2b86Z3H8NLux1//AF03
P+e9N6FX7jG/WkbrT/8AP1qNvvUiRhPy/pTW+a1b9KYT2prULDW6Uxu+af1HFRtyaBCMRj60
z+Gnt0qJhuNN0w9QZsnHSopKkPTvTST/APr71oURtL9mbI6dxiryyiZA3XNZz8evNTWj4XH5
VSFZFr25qNqXzKjJwaDMYw//AGqgbpUr9Nv8PpUJOP8A69AFvbw00Kf5farX1U4R/wD66DUr
+TT1i6VZWHP0qRICn+tArkAgBzxPrU6wc047V+vak3ewx60m7DJVQD5VI/GrAaNPeqe0CPa
pFKg7ehqOYCz5i+nNL5mf4frVfg88evIp+e471LdwZ0JGx2p/nbu9VvzqSnzCuS7jRnmHk9
8UuPbrUCHn65p6mo6UYF07KsSZ+a13GmUAZpCuTLR2HwMrQvyn/GgLEmeafn/JqPdg0i9ab1
GtCTjA5Bo2fWo/4+10JzSGSfxUtR7qDt3fWgVxxx9ab0P/1+1KRx7Gkzj2oHdknU89qX+Kow
2e9G75qBEH5+vTijP4U3PrTT7c0A0J696RutJnj+1LxmgB0PekPTtSHJp1AC5/Ck3/d/rTcn

8KQ+3WgB3JzQvfPWkuJ4bRC9xKsEQ7vxXmvin4xRwlrbRYv0fp9oPQVhVrwpK8i1Fy+E9A1j
WtHQLczX06xD+5/Ea40P412T6q0TWDix6L00fxrzC7urnU7prjULk3UnX5ugpu4beAME9eJP
M539xaHTGgvt059G6bqtnrMamsrhJ1PYHmrH97J2gcszV84aZdXe13UU1jcGKQdh92u5vfiF
rF34Zubd41ju/KP73HXiutZ1SubvcmVGS+E2br45+DbXX5NI/tAveJ1RVqtqXxht3v fsmn20
mG6XL9DXzBoXii/v7efy9Msm1CUmI3Lcs3PWvUvCN95XhSy0oPGsq/xynvRVzK1BXYZ3sz0
SC7juLoS308nzHk9cV3m1R2f2XfaMsg7tXiU0rHWIZpInFvZxcyXEnpXffB+a21HTJ7vT5/t
sEvKyDkGowuP9vL1aLnT5Ve53fUj+dKTmq13q1pY1Vmm21u3WpRdQNCJvMUP617KkmcZmeJh
myj6H98vFXL/AFWKwjXu+Pu+1Z+o3yXn7tB8vYk1Hb2f9ovg905qU+hVrbmXeXF9rsvBOD27
CtG08MxWcLtNln2n6Vt20EdqpWJB+NMuz/o0h9QaTVh83Yz/AAmv/E19AWNb07isjwsuzSU7
da1T1xWnqQ9WHRvrSA5HfrR/Fz1ooIE/iqNv+BfhTv8AP1pGbn0xQ04zPzZ56U08/wD16UjN
J1560CI2Pq0fpTW56U9uS3JzTGHZHPWnoVYj2/3WzTH57c+tSbF/4D60yncCKmn/ACad1/wN
NAzRZEjG60dBTS9TUZGTUGRt/nNR1ue9SsPaoQtACbse9MY7mp2QT7+1Rt+n0rYoa9R5wwwZe
MfhUn8Peo3+9SAsxXAmTPcVJ+dZ6NsuPRG/nV09DzmrJ5iKb73HX2qCX3qeT5R2/KoHyfSgm
x0gHHT8aeq/NjgUuDs/XmnjmT+tBoNVdwz/Opd3zcfpTf4ef0p30SPxoJ2K1180ifWowc96a
0vnSyf3d2BS1gx2JVYdad19TUDsfdpDHj5fY1Ju4zzUY9aAcF/XqwJt3yinJv/kVHuGf9qng
8e1QSSZ5I605e1MXAx+pp3QU99gJKTPG6mg5a1DZpASZ3EUtMQ5NKpwaB3H4/TvTh789uKZn
d2p/agQrdKUHN2ooByRQULUJpXj3p2e1Nz+vrTqCW7iZ7nIpePyopMjNBTVxSen9aXjNNZvx
pu75u1AEuU0Z4pu7P1pc9/agBc/Nx+tLTc4570dTQAH1/KgtzUc00NvEZppFijXku/GKpw+I
NMubbz472KSP0DtNJuyuBfbpSL1rjb74ggTL9lg3xj+Ju9Wp/iPpVppn2p1dpdgvkK0aw+sU
+5o6cl00p6Auf1QdWPSuQ8SfE/TtB/dWn+m3f90dK898SePNV8UKUVvsVr/zzT0rDj2QZC//
AK68mvmFvdpm0aF/iL2u+I9U8Svvu5v3Y58pTgKKyhFHD8oPye3UVJNNFbRBpHWJD/z0NQW1
5DeXkl1byGWcfMa8aXNN3b0paFCBHy1ctNLmvZcBcJ6noastBaa0nnaJkQ56J3Jri/EXj/V9
bY20gx/Y48hSwGXNcs68Kbsawpuex6jpegrZxVxE0JW1/1rtKK53XLaLxdpP2rSdeis7hSU
BSUYbHas0+G7iXwpdWMm8TTxYdz1bivn/wA0fC7UDqk9sJJ4Bay/uwJCK444uFRTdX3eXbz0
h4dv4ZHXTBvAl3Iuo7IrgKdoGAGz/FipvAfiPR9fvjaanfEKn3PTrXA+JNMv77W5YtSuLiT7
PhBvbtXReBfAsfiV0sP0itogMk9GNW1Fw1lds1jD11Z7r4ttdIufA15DLd+XYSp/wAu5x8u
PWuR+HeqeKPBWmNDpctbB4bjH7nyjhsVW8bfYPDnhi680T+ZbI0YWG5bJDfjWH4Lge10wQHJ
Kpgsz16GBxSwsGjgq03PY91i1yXVrWKbaTJL69a0tA1J7Nxb3UhQySf8BrnfD11eXdtZLEmF
2fPI1eI/G/4sv4b1a48Pw+ZviYYmXua9LA4n21bkW7MKy5Ian23p+mRCMyb1nP8AsNkCpdL5
a44x834V81fsL+Kdc1nxD4ojvb65vNNiVw/ftuw2TX1rAnk+af75yN1fVViezdrnnpt7lpjV
TUGP2SXGPuHrzUrygDNvtQYCy171m9RjdAAGmRAC1pn7tU9KjKWcX0/KrhfAqhNDW96bv/HN
I8gNND//AKqCSSmH7386cHwKP4cYoAjPzHFR0f4eD7VK+cVGeD0zT6XCxGxwe0h7Ujls8/nU
n3T6jt7U3jd/WizL0Iu3+FMiz3xUjEGmE0hNDX+8KjK81KHxTGoJIm6Uw96e/3qiJxQAmcd
PxqNv1qUn5eKjBk+1AEQ9jUfUnH5mpcn8feoJ83FXyjsR5zzUZI5qXdt9vUfHvSsxWGFx+N
Txy8jP5moN2T/jTd3+TTUirDuTvJtcdT6Z71HKMilkbchx161EsmOGzWouU6z/e4pd+D168HF
Q7s0eMDPenHk/TtSRRL5gHb86ZLIAHJpm8kru5qC7k3sF/1TbsKwxQaoqbIxUK8U8DvmsG71
EvU1In41Gr5PrTg3HrTuA+pQ2X79KhHJXtTvvd/HrRcRKP1NPA56e9NHSnf/AKql6iuPHXt6
UtMQ4A6/jTycU+tgeo/06jNP/wA5pmc9eaXovrSEPxpT/wCKod1Se/NBQ+nA8jFRj/0ad96g
kdnj6etHUUn86dkUDuGwU6mUA5oC5IOe9JUecd01SUBcKQ8D+tJ34oHX1pXLsKTn1+tKOTSL
yc5/Og/e+tFguLu+tFN6Gm3M0dtH51w4hi/vNxUuVtwOJ+NGi6nr3g/ydKZ9yyq0qr8pK55r
idMC29qsXkGELx5YrovF3xmW08210SLz5MYM0nQVxnhzxPF4gkkHmIL1WPmoxwxr5zHY1fYZ
20Iu1mdAJ1wOMCuE8bfE2w0ZJre1xd3uCAQu5RXJ/tL+I9U80aHpUen3LW0d/J5U20HjivLN
L01rW1F1ZakNQjcf0s330ryJe0qU/aR001Wbsz3fw/qb6tocFzLgTTDnHStNMH0Bu0e3c1x3
wst5dR0dIkLEwsy0xHB0a7vV9f0D4f2X2nVrxBIO+53NSpPYJqzsc/rnwpl8d6razXmoyWum
wYYxRnH61znjfy4yeGPhZM+leGLcatrcnyZQb8GsHWPG/jT46zSav4StH0zRASj3si7e09egf
DX9nrw78NpReXG7WNZPW4u0Qn0FdsIQiv3z9F/mZyU9paI47wB4Y8b/EPVzq/iZTZ2DD5Ffq
K9q0nwzp+iwFbeMbJy0m0Sa1XnUkVW1DU7XSLYzXcq20Xv1P0rn1Tp0pz8pbqSueW+hIIFnf
j61w3x1f1fw54as5Zru6Vb08rHb8tXCEkf2iRrPiA6BoizaZaf3b6hPHx71598RLbSrBbK4j1

FtRvvNBadjnPNcuIoxquN0pF6lUp0972Nq4vLfxBrcL6fBletP8A61pBtC10dtoso8S6V/Zl
q8U3mZl8v7oHfNaXhTwrqfiCWK5i220n+XlpMY0K7C48Q6Z4Si+y6cPtN7jmX3rz/ZKm072S
0l1W9Fua/izTrG+0eWHUcRIV445zXnGmaXDpru0btM+fvu0auz3MuoT+dduWdj+FRvcJAe/z
e1ediMWp01M0hTcdzorD4j3ujp5c8SvD03J1FY3in4Y+B/jbceab5tN1MfekUAbhXLalNf6x
P9ks1+zwlvnmH3q018M/YdPHzP53/PZDg5r1MuxLpTVStq/Lcxr07r3dD3r4U/D7R/hZ4a/s
nSIMCQ757o/emb1NdjJL1A5rwb8TtS8P7Le+P2u14++ORXsWi+ItP8RRK1n0Cx/hav0eni
IV9YyueI4yhua0AYvUuox7bGU8k4qDzPJbnp45XvUxjCHq1dNiLot24220Y68UyWbYKbPP5f
G7iqrSNL64HSmRYmMvX8qE5PSkE0e2efzq0ibcdfxoExlIT60523D/Gm/wDAvzp9LhyJp600
uRUn+FRZBxSHca/3PT3pufSnE7j+FRP1+npQUI3SmcA/Wnk/gaYw55+vpQTcbsPrTXps2M0x
hg00DdhhGKjbpUv50z0zSEQ9BzSduvHSpWH6VFs//WKvmHcaSM/5xTD+Qpx750c/pUb4Y571
AiPHzevemMOcae3PGPwphOKdhXImamkZ7U8DNRv1z+NH0UhIn2ZH0aJVz84H1NR+4PQ10j+Y
uf51sncZ0Y5WnFufRiUW9ivalzn3pcwDg3f8AnVYvmUnt7U9zhCf51EvWmwJB9TUuf196jXrS
g5FYaCsS7qcG4IqJef8A69SbfpTeo1oSzyfeng5PqTU0ec09G5pCuSj+dSd+wqIY9uadn+fW
qsgepKpyKdu/Co8nPOR9e1C8jtSeo7E+7Ipw0R0NR/eF0z70iR/86X0T60wHN0zg/wCNA7Dh
x/eX61Jv+XFM3f5N09aAu0z+FB0aKKBC7qN3p603d3pSc0FDuop341GTm1BwtArk1N9ab/FQ
33aBjs890KbupKaWxSsVcg1W8ksNPubqKPe0UZPNf0t5421Lx1c176Qxxq2PJDCv9FzJ9rgu
Iv78TlMvl1KeMx3l3CP8AWRzsM9K8DMZSjszpoJXNt0XZsiyhrzjX2l0TVjJfJJ9naZl+ccc11
1tqLtxL971U1ieLdPg8S6cbWc1WZf4e0r5qUeZ6s70+TVGB8U9XPjT4eRLcrtutPuPMEu0tT
fCDwPow80S+ItVuml0tJ+Td8grhJ7HX9D0u70weVqFu/3Wu0qe1X/Cdn4n0X4cavpU0AeK63
FcV0KDp0XHNvR/mHPd6I9T/4WofEGn3G1+AOVN5B8pLrwBTvCnwFn1W+TWfG2oyandffFpke
Wjdqwf2XdK1Dw5Za19stoVmm05QeoGK92tdSS50A3zU5ezpzd0m/mW5SWqL1rDb6bbLb2kSW
tqowI4lwBSSnbG0sj+Wn99+gqhgniG10gKH/AHsrdIU5avMvFmpaxr+tJaa1KlppR+5EnVqw
rYmnTvmZxi5m14r+Ldtp0z2Ph+MapfDg3B/1Ufv7183eP9c8VN44tL7Wr+S/sfNGEhbBGP8A
Zr1fxLqmleGbIxWdugHXcRXLaJ4H134oL5Ekf2PSw3mNcv8Ae+grLAYubn7Vx93bUudFLY47
xt8QW+Kvir7NoXhg28iQizih09059K9U+HnwG0v4cWKeIPHF+Jr1QH+zscpGfT3rtdeTvDn
wptXtNEtEuL9s77kjJL/AN41474+8Ra14h8USWmoF5rcruiH8JNetUzC0IfsKXurqc10g4a3
PSNX+LJ1/VI9009fsmmgZ3d3/CoXlg06LzZJQ0R16n868B8Patqkfiq2VYZDL5+x+pQDFeu+
N7JL61dGJ3kBgvpXi47A2nF0ej0ijV6WN7XPEVhpEKgf6TdyJmK0Btx06qehaLr0r3v26/m8
lMDZCnG0VP4F8J21lbi4kj30wAWWU5NdZcXG30z+I15HJCj7kFd9zrc29hNkdoo2n5vVqjuH
EvC59qrSy+ZyVbIGMdqiFz90Fef5V20qNjCc0LEhU/xH/eq9bXU2nXEdxDM9uw00wqks+P7p
Jpdu7d8mTjP1r04z1DZ20fc7nTfipcDy4NR5jPy+fXr+gana6tpyvZzL0vUYPSv164CEEM00
ntS6Lr0peF7gzaZc7MNU27+DzXu4fM7e5U0adFS1Wh9UmASSZzirCQhRXN/DHxbP418Npd3C
xrIGIyneuuax/jX0qs9jivZ2ZD1FNb3zUv1VEQabVyE7EfEv/16Yfzqt7v1pr59qdhXGDvT
Tz/CfpTv4aax/OpuWMIx06dMhtTM+1SH7vvUf3j9T3pgR8+tK33f8aX80ajYnPSgVxKY/wBf
m96kb/J61HnJ9qBjSchvTeM05+PwprHFBjFuqOpG+X8qhfpjAzV8o7AdoNRuN3/1u1P2/Nxi
o2+9zUCGY5qJ87sfjU26oGG6gBp6801u+cBad044phBx6n2q+UdiAjjvz3FJvKHnoFwPhy0e
PTmom5XsfrUp2C50zS7fX0pd3bPFQtyMeuak+6fX3NXYZF02WC0o5PXFRBs3u+RUmT9Khuw
0SD/ACTT10ajHr1p7HHWkTYcPlFSFuKjz7fjT1PofzqrsVx9PX8aj3U8Nk1I7EjNn1p+0cU1
aM7WPvRqFiRfXge9PLZzUPRumM1LnPvQ9Shx7U4NmmDt396dn5aCbkvQfWjd0qMHHS10HLYo
CxKDzTvCo/pTi/FAWHk0u6o8HdinD8qBD+x5NNopM70oAdntTfvCmF9p6UmevtQBMGzSSPU
bdaTf+XTNA7Ck7jSUoX8aheTzZ6VJoNe6EUnZvrXzR4zhFh4t1WLt5m4V7tq99s0f514j8Q8
SeJHkByrI00leNmEbxub0F7xzDfKRYf9jSywi4i501sdQtTKP3fT7340gBDdBXzfqehY52WC
6sWbFGHjP8X3hUX22e0Q/M2D685PrXU7vMVUPQdVqhfwZi4UANjdxXNUj3RpEzvBHiuTw3r81
7eIX091271HQ16+v130aXlpcDYwyGT1rx260Ke906Tb+7919a5nSfHereDb3ZLv2Fuoyc1jK
Dq/DuaN3K974i8QeHfibf3sd1LqCJIVWBhkH6VzEvjzxJ4r+Iqf09vdLLhLcJU/jHxHcQeIv
7TtWjzfzvm8p73epvht4uu5/FclzPAsE+75Sqcn1r2aNNez9r0Ce1rnLJXdj1nSvh9JazJqf
iy6iNrD+88s/xGu0gvbjxfbxwaMi2m1fd8xFWDXjfjj4i3er/E3T9Pclb0GZFkt24D19BaV4
r0i3uE01dlg+35UPFcP1eXLG+lzVza3G6d4C06ygy8uRTJPjrmVX1rjPGPgVutPkjubWCK/tY

/wCDHzjPevVjL6t+fehLlF08sMjMV+6aynhaa16kKpK92fP0N7a2sc2y1WCQnkMvzA1Y09I7
iZpnXceoNdF8U0t0soNciWEBJcYfYaz9LaIjheMfWuZK8dDS/U0omby9qYHp6USvtBz+FNeXC
gD0qDZkcgC1V0jdXZEp9hh1k+b29aXr16U4H5RtHP1qG4fPHKg/nXS7RMiXai0MbF6U+W7WJ
sYP0NZwmJOMfj2qQzbWz1f1od2VbQJ7rYfn/ACqhNL56kd03y9qlbEzjfuyT65zTJ+h7YGee
laxdmkJK59D/ALPjtD4BRWxnef516aJcn/Oa8o+CDGLwPBz11PFeh/a8Ac197F3R5k17zNJn
qN+v4d6qLPv71IzZhtWhi0J6/wBKl/zzSv8Aczzn2qPg9P1oTuDVgLdcdabnLDPNL19cdvrR
jn04pt3E1Yi4wP500/XP164p23HagvSNBr/0ph0Kex3H5uaZ0P40CI/pxSN0p7cdaY3IprUT
WpC5wfrSU/qaJf6f1SExjJee1Mb8vpUrc9jURGePu0AI9Rtj604tnpn8aa3SgCI9P8ajY7q1
Zd5+1R9/equTYjb60yXn0zUr/wCc1E2Gb39e9SaJELfkKYfr17mnHGf8TSUA0dB0FNmfa1IC
D3qCT57oeir0FaNWAE0F9Kk67c8Zpi/M0nfvT+oouA+n9/u1G0g5p498cVmK4+pAeTzuHrUY
YY6inFlQMkydvT86VePwpo0eKeH96b0JsPBHzUgB/8Ar1F/On9vWk9Cx6cf/FU8c46Z9aj
U/n3p4Yk4JNAXYLy3H061Kv601fen7txoEHT8aVG5pvBI9ak+tD0BIcG2/8A16d99qbtFG7J
/rQKw4n5qcDio/4u903UBYN/PvSE5pcimEZ/+vQIG00uK0v3h1pxxj/Ck7igBg00v50717U3
J/8A10bqk1H1s1XnUv61NjmkH1oA5XWtPLRH3ryPxtbYvLVtvYrzX0HPEJh93NeTfGvwtqQ8
MzX+iWn2q7gYSeRnkjvXB16TqRsi4z5Jan1kiFRwfoabk002axfDPjij8UZj2myvojtmTJv1
dDXQKhU18jUhKi+WSPU3RWlyGb5f++etVJGZgcg4zjjvWlLy/U+2az3i5K5Pc0gWHE5kVHXj
a3Yt0rndZ01ZY/3ieCAefl6V0DTKW5xz6/yqGZt20dd/HNRKnrfqacxyugeFt08//S4t/p5g
7Vn3fhiPRdfW9gl8uI9VXoa6xPs51b5Tv45ximX01idJdz7h03daxbqxbdybo5a0Wxbxedeu
YvNmFAG7opq34hl18V+LIjaZySqIyVDdeGXupF2SfKJ03BxWlomo/wBi6hHLBKni2d+CXk1o
qnK1JtuyFZM9kgvJtBtLW2uJvkHEjF0p/wARbXSrDwo2tXk09p0E/cNE+Dn1rnZtUj8fad5C
For1R84964v4i2usa1p+mJPdgW1sfuua80cJYrFxfKdjotyRui1YTy+IbeC61Yyv/ffrWzaR
+U5QL+fFY66r9i07TLWLSjLcTP8ANJt4x/eropAIZecbvQV9RiMMsPbld0efGTq05Nj90cVC
7nPG3jrT34GDjPHvzVaSUu2AoxnJzXHfYL5ewsk/zL356VH8z/Mflz602NFD4Yhp0gwaFj/6
yntUWZXKRlmYgAcE0eWBkKA/U07GSB0waXPyp1yfvY6VqvIG7bCBGzx90d/SqjquDwwyMc9K
uquV4Df8B7077MHDZJ59KqLtIa0PavhADF4Gt13cZNdeZsVynw3Ty/Clq0Bmuriil195B3R5
UtWyeKXnNaMPze/0qrDD7VbRA02DWpm090c0nQ0nU0bu0/4UNXB0xGA3vTtWLGEPWjGD74p
n3RSuNxxGZ/yaQnN0J3f/AFqbnn0piG/xUjcMfmoZu9NPXmgVxpz9frTSfy96dn6/SmNz/wDX
p+ohrLTHfB6cU9vz+1RN3pAMY5H+FMcZp/8AFTfz/GgCE9f8aThu3vSv16GmnDYzmgbmd3Y0
zdUjdahoAY7HH3u1Mz8gB5+1S/yqMgZNAEbZ9Nv6YqMt3qV/8571C3SmBtqf901H/rGP+1Tb
lyI1/wBs4oGRTvqWsdFPU1IMfT3qLHH/ALNTs85/h/SpES9euPpT/wA6iA/D3p6k+9BI9Tnj
NPqMtn/61SdM0DsP6/jT05A55pi5N06ev4CgZIEPrUg/SmB/TP8AjSg/Px96gB+f169qd9Mk
Hmo/ut36/jUn8P8AhQA4jjge9Lu27vmH9KTA470g0F/xoFYmzjr+tLnLfWmDgHP+N0Jw1GhR
LupuA397pSBs88inUE2FiZ6Uo4x/CDxTc+t07Ht9aHqULSA4/wDr03f70v50E2JKYf0/1Ru6
4oY449e9S3ctKwnvRnmgnckY5xQMcTmmsu4Zz+VJ16HH0pM5zQA8tiqlyS3Tj2qRpM8fxVC3
XH0feoKcL7ni/wAWv2et08duNU0v0jeIogd1xb/KJPQNXh8PirW/BniBfD3i7Sp4rg8JfW8X
7uUZ4r7S1QFqytb0011m3ak7gjlXGPmWuWtQjVjyTdjN03psfP0c6zJ8rDb0qpcw4kz8u1um
K6rxV8Nb3w4ZrrS91xad4TyRXMR33mBLY7WX+E18viML0htqj0YTjJGbp1z83pms+SfZE0cZ
6VpXLiMuxZY1/vNxWPc0jxbk0+Jh1ShrGkuXfUqz1frs+bb71LGXCXHP92qRZ2k3FSPx5p7
lgvzL8vs3SteVtWZCaRf09IX1w5xIeNrcfSsrhx4L/tYebZSGxux0ZDins3AK5z2K9Pqx1b6
tLDhZfmWud0503zwLumrGT4L8XX3hvVJ4tWtLie48r5JYB945rmvEu1+KfG0oCS9aTT7QtuE
LAxXoIvI7iQHK/3a6Iay13a+TcKvHyiub2nsajq04Lm/L0NEudajfA0n3WkabHHK4uRGvBat
y8MEokf+lyKN39m/1e6TjgKadNIZhn72cD6Um5VnzSE1bRE8kY+bdja38IquXYJt2qp/pUyR
svNK6eWE4JGevvVJtmTsQLwf1FSEqy4z9aZK2c4X6fWk+Yvkd0KuJSAAbOKTaWcNwxJ4AHSn
twh/izmkJ8lC8jiGMD09jWidyGi2kfyrx75rH8S+LbTw3aSLxPcshjjh6ljjsKzhr2q+Nrn+
yvBtr9q04q16f9TH2r2b4Zfs/WHhmdNS1o/2vtr0fMmOVj+1e5hMucn7SvouxxVK3Kdj8MYG
u/Bu1TSWz2zSQhtrV2iW5QVJbQqiL/B7DirDDj0r6N2exyJsiChfxpeKU5NRqe9CdhNXF2+n
1+tITtZT/Tt9TTD9ffDU7hYAMj3pvIXHByOwpM5j9fehYfhtIsNK89aQptx6mkPIApDnHag
Yjg4NMP51IwzUTLgf40CsHfA4ph+93pTx0zT0vNAXrCmvSt1+tM9PbjrQSRyfepCRt/rTx19

DTSM0ARPt96ZjgVI3J7j3FRe2DTbbC4xutMY7qkfsgcdahbv1pAB6/wD1qYRil3CkbI71fK0x
E/SomqRlLd6Y3IP54qAsaE/Mqn0HSnh8Dnp61CG3NUi0F2ZJTU/tTaevX6+1U3c1q48dafn1
qMPzTu/9akVh45HrUg07p+dRKcc/rT9wagZMDk09ZM9aiU4P+NPOAkzninbjUXG73NP3UCuP
VvbGKK7/A0FRqfenK2aNS7IkB96VetR7hTgfSmS3YkTlU1P35qMP7HjpTgSW/hz9KQDy/wDn
FL94+tRjg55p46D1+1DdhpXHdTSscY4/Gmjpx0pQdtAPQViW7D60o/Kk+8KQt81Ah7NUZ445
P1pTzjrRn8P60AP/AIsdh60xm6e/FLu6Z7UueKh6FXGY5qN+Af61Pu5/nUZHT/0KgqxA331z
n+1Rnr6e9Sy9Mdf0qIqT2/WpKcrE04/hS9R/jVS/1zTtLXdeX8FuP9txXJ618avDdg223M19
KvURp1fpSuxcx2MsKzA8dfWuC8Y/CmHwxJc2kS204GcnhSa5/UPjfrF0dthpMWnq3/La7bp7
1wviL4g61qQ1F/4iJHe0z+UD2r0U0bdGXm1szkPiZa3dpo+paSWQ3/17VMBDc15n4H0veFr6
30/VQ4tblMxo4ztNehTeK4baab7IjSSt3b5mesrVdH8U6vNZ6kNCvZ7GKTzGYjB965vqsKd0
SS3NVUm5JG6LbEmMZy9ueKe8W0cK0a3bRknh3fcLdVJyRve5tsM0mR6cV8u3yuzPVTuJnvnX
j35P8NQp/rCE2/e6YrZuLUe3+6c4zWvcx7HznC8cp1raMuYyKzSKH5KnHOK0rCS4u1KZ2qT3
4zWVM2VOMD6+laGg83B7cd6K1KPLcadjqLeIqNq9uuau21uFZx1YNVeCLLYHUnP196041+//
AHh82P615b0N7Eh2kdJ86gk2liKV2II455GaTb0/ee9Fu5FytLb+X1bJ2/Sn28W7PHTHTDU4r
li56detaGmaZea2/k2sW2PoZT6+1dNKjUqu0CXJR3M0ru1WCJDPP2UDtXaeGvhYup/vdYQSh
hxEfuj2xXYeEfANvoy5K+Z03LSd813NtaiIA4/MV9Rh8FCgrvVnHUq0exk+FfCWl+F7P7Pp1
jFaRdxEMZrpkQBKjAA9Kfv2s0v5V6HMYk1Cv/k1Hv4/HvSffbPbpWiMkSF8s0xPrTD/k0Y/i
7HsBSH0qix34nFMbqv0/G183Htmh3+XtTuS1YZ/HxTwRz2x3pobn8eppr859qb0JtcRjz/IG
m98UFv156GmtzQKwfeFNLetDZpn3u1AXFY7hUfzD/wCtQw+bFBOKFoFyN2zUZ+8a1Ye1R56C
gQhbPwmk7e/vSE7j60m//wCtmgCP8qa30qT0/rUL/L1/0mAz0fb1qNsn6U+WoWak045uv+c1
Hk7uppzDcf8AGmt14yPrQFyNm2n6Hr60zzKeTmozjrQIughT/nmpt2TUIz7U9u1FzX1HdR3q
Qcf41GW5qSghuw8HsKfu3Coj2xUidaCR4c4705c1uRxim54pR1oHc1B4p1M3Cn7vSgY+nY5/
pTevvSj5c9DigCQHnkdu0HJ61GDilz9frQBJ5mPrTicj8e/amfUf/Wp5/nxQA9eff8AC1Xg
dW/Gmb/Yninflno0aAJA27CjnHqaVW0/r+dMBNLuzz29aLDu0J3L0/8ArUN8x7HNN4bvzT91
Ag/2gG470ufX9aWmKSxI60AG7JGM/wCNKW3cjmo7t47SPfczJbJ/tnFcfrfxc8NaCPL+0fap
f+ecdJ049DtN2e1KNxGW/WvFdV+P19M23StP+zJ2lmxXE618SNX1Le99rjQx9PJh4/WnysX0
j6TudZsNPLG71C3iRf8Aar1NT+M3hjT/AN3F0b2QdRbjIr5kn8T2LTFNsmo3J+Y53P8AjWlp
2n+LNb+TTdD1jj0MSMPLXpSt3Btvoeu6p8eL2UY0/TY41/573L4riNa+J2qaiubzXtib0Yrb
5ec1JpnwF8TathtU1CC0U/eRRk/nXWaz+zj4ftT/AkdNPfs0PnenZINDxy+8X6aj7jC19If+
emX5p9pc+J9cGzSNFuxuxgiHaP1r6V0v4d6BopzZ6Tbo397bk1ura+X2wPTpRzIlxvuz5p07
4Ke0dc2fbprewR/vsW3NXW6P+zJo6kHVbye/fuu7Ct+Ve01N3/1qVo/ao5maxVtjmtD+HHhn
w2Y/s0j2ySL/ABlck1tzWySRexSGPQVZC49qVqkfKeUeMvhZHcbrzTAsdzjJQ9DX1l15HcWM/
2a9t/JdevbPvX1M6f1XM+J/BVn4iixLCvmdn71wV8LCqaQquB88yL56dBx82R2rMuoeTgKec
/Sux8TeBLzw1KN6efb/wyD+GuWkPmbwv039a8CdCVJ2Z3RqKS0enUYU89STVvRABP2yeeFWl
uIj749610iLbqaJ73r6VTd42BK2p3Njb/wAXLY9a0nVdv6cVFYJ8nP3ewq0oLt/s44zXky0e
hupMoywFtuz5c8f/AF6iciLCt8+W2jb/ABGrQle7uEtrJGmm3cnHC13vhP4bi3dJ7zM1yRnJ
7etejhMB0vrLRGE6iicx4a8A30tsst6CkHUQ+tevaP4fhsIViSEIi8cVpWempAPujn0rQ8vZ
z7Yr6mnTjRjyxPPm3J6jFgCAYqQcexpNx8B7ij+LP6iteUAkk3A8ZzSf/AKqbjJ9h1ozn0Gap
KwkrDuJAu0tn0pv4Uo07NwkJj2cHsf8AgNJ5v/66Q+3fvT3IJPT64piGhsfQUHtnP40o0401
m3NVE7bDmHPXNNP3h0puFqaXtQIbTN/F0kI4prN1568cUCsB557e1RnF03ZB4b2FMfjr9aAs
MY4PfmMM461I+Bx71G/BB6GgQjDNJuA4pu76/Wk3fNQAjnn0zUfHrUmcjmoKAht9yos+2fp
Tj75z6009M9KvmHcaRnn0qLq0Tj6U5utNP3fSpegrDXHt07imH73fp2pZGJPXduJ02iw7Ctw
00TUR7+9PPH8qbxzj6cUgsw+v1qXPzYqBT+dSbsn60WN0Yfnn+tSbt31qFfm5p+75qBSRJtA
Hb86cDk/5xTAc9s08tj0HaqJHg5H+NSVCrfr2p45P61Irk45W10M/wCFR7uMU6jUok3VICcd
veog2RTt3vQImoGMf40wNzUh5I4P1oABz70/txUd0WTigLkh+X/690353dqi+83tT1/D8aHq
WpXJN/HfFLu4H0pvmeYev4U7Kxx51YRq09M16bi5/Kn8EZxgDnLHArz7xd8bNC8K7khkF5d9
Nic14f4v+N+teIneK04+w2zdk6kVNYGz6N8S/ELQvDEOb2/Td/cBryfxL+0feXQeLRbXyIsY
82X+deHyTT3ko05piePNk5ro9B+G2s+I3AVSsfq9Vyrqxkbeue0r/VpHfU9SaYHnbu2gVm2k

+qarJ5e16dPcPzjanH517d4c+Ae1Wm2bUP8ASpdoz5nIr0vTtFstMiVLS2jjQei0J2KSTPnb
SPgr4w1795dSR6fG3/AjXd6P+zbo1tzqV1cag3fexxXr6p8o610q8etDdyk2jnNI8D6DoQAs
tLgi/wBrbW8nHA+Xn0qcqpNL0aou0w0DI55+tLsGRTqB7H2oLsC/NSsAT/jQfypN5P0NTYq5
Gy+1Q701WC3Pem/55qhEZXjpUZG4cc1M01JtqbE3INvy+1DfM01TbcGmkZah6D5z0vd0jvEM
bqGB45rwr4u/CPV7Vota8KhXKf620dvvV9CgYprirketZSgpbktN06Pimw8U22rtJbTwvYapF
8klrN8rA1padA0WpoG+b0P4sYr3f4pfArR/iJG9xEP7P1cfduo0D7V83ayfEXwu1mKz8SadJ
NFvCx3lspKyV5NTBP/10dMK99LHrS0lqheXZHEN8bnGK5G48War421BtD8H25uWZtr3jL+6j
9TV7wr8MPEXxeliutXSfR9CbDLft2ySJ/SvpTwf4C0nwZpqWum2i26jrhethPDZXcm/aYjfsV
0tfRGV4K8CLoWj28cg/0raPMkPVq7K3tkjTn86sqip256ZoY/h7GvVbvsc9hudo/maRyPQZ/
KkLbu/40SN27e9P1HYQyH14pKYW5FKrZqyG7DSN/48c0feapF+bp+tMp2G3YH9v/AndK01N7
mnD7vpTJbuDdaVTt9KQfMaUjNMdxQwTtmkPze9Ie0e0fSkBwe/rzTSIbDOQ0tIGBo5/h/wDH
qYjY96Yg/OjJ9KC2Tim7uaAFz834U3IbuKXcKawyadiLkb8/j61HUmctTDx/nrQ9C7jTxwOP
So+/rUjnNREd0BSJYh0abnt+pzS0cHPekb5aAdDkVEvBzRSZ/EUARK8g/zpC3Pp7U7PSmN8
3rQA05H/A0uo+SnPepDjJ6VH6/zq+Udhh0eP+Be1NbrTm/P68U1utLVCTuWU/Gn1lvzqIMTTt
x4/rU1rU15SRD7fjUq/N0qINj5jxS5z7UEEyGn8Gow2K17+1HQq3YVW596cDx7UzdxSr82fu4
oJuTlhjrs7qi3bn02n022wsSDqKdn6mmBvrUnf0pCu03GpPu1Fu0KctAx/X+WkX2p1OHXGPx
xQBJ25p+dq5ztHqe1c34n8caV4TtHku7hSwGdlfPfj74961rzNBYZgt8H5u1C1Icux7j4y+M
0h+EVKhxd3ZHyqK+fPGfxm1rxW7ItyLS3C42I/XmuP07TNU8U30IA0uH/wBdI1en+GvhJa2j
pJdr9om755xQ1YFG+55zpvh/UNaJ8qKQc4Mr8V2vh74VyXEkfy7mxy5+6tes6b4VjQLmMIno
K63T9LWJRtTYue3F05SVjj/CnwtstLC14vMkx1Irv7XT47Vdqrt+nrvq0MKuNtSbflpPUP6D
VjqUjFKtPbpSeg1qJv8Ap+F03f1703ANBbD9KRvXVHY9KUj/APXQ09Jtp3C4p69abuNHHvRj
rRYm4Y7e1Awf8aG60in1pGhIBxjjd60wDNH3xS8VNgE2nimsvepScD1pM4/GkBDjnNGQ3NPI
60zd7Zz6UAN/rR/FjdSFv/10bqdhN3E6H+tV7+wt9SCLcQJMAf41qwxzx2oGcf41RDV1Y1hR
YxgKAPQVZV+0349aqKec1IG7d/SoavuC0JvMy39aTnAz+dN69aN/vUcpVhenH4UjLTdxpv0a
sf006mnUzPvR707Cu0JxSk+nNMpehp2C4vTqe906Ac9qazf5NIRuqrk2Hg4pW0ai6inHGf8A
CkMdx7009fTmkLcUA4qiB2Peo25/xpS20BxSHnpRcdgy0f6VHRkFvf1ooIF3U1zmg8Z6fiaa
3I4oAY3Smfw1K4568VCevrTuFhCOB+Vmb/0KcTlj7d6Yf7o70CGt97g4pG60Z3ZpjE4/qaLs
dpx+9TH4pT8wprE5pAM9Pf17U1hTi238T3prPv7fnQAxjkfX1qMn6ehp/XPp9aY/NADScVGx
57/409uR0pnfnkUAWk69c0ucmmZ75z9Kfj8KDTmY7GB29qeTtpm/56UNk4/9Co3C7e44vyfX
FSg1F96pB8wqrCWpJnmnBv8A9dNGM077rcg9akQ/dkdKedX9KjD9fWnk7qbVhWHba1U/N2qF
Tz/WpM7qQh+4U7dk+1Q7uvass7XfEFn4etHuLuYI0oBptWG3Y1Zr1IU3SthfevJPiN8drbRop
bLScTT4xu3ZxXnXxG+Nd34hke209vKss8npxXCeHfCmo+MZWESmKLgY8cd6SW15Gd3LYi1b
W9R8V6oyTsbqZ+dgNdr4R+FjXZF1qgG3/nik7rwr4CsPD8f7uLzbo/NuYc16Lpuh7cPN9cGn
fSxaijE0PwzHbRKkdukSAyYB2ro4LS03+6M/7XerEjc7Y81es7H+9zSKetbU8E9ugNaMa4+1
Ku0001SbP50ACjFSU0DOT26U6gBQM0v8VIG4xzRuNTcuyDdR1/8Ar0vQUm6ncVhcZ6ig/eFG
6jdRYLiN1pc/5xTafSKuNzzmjv7UFvakoC4fzpM5H+NIzAUA4qbE2BGz1pxfNMLc04E5+1UM
Uvx3/Go20TTscn0+1Mx16n3oC9xu0P6U1Se9JQAUBcn15pu61z810wrj9uenp0p3Ib2pmfan
b/XP0pDHAKH39qX0e1I00g/E9aX+Icde9ILOngZ6009KXdijr0pgL1TpxTs496Z/jTnehoS
1EAz1/WnZ4/rTM8e9LTsJSC1HWmdc96dSKDORSEZ/wD1UpPpSfxU7ktXF96TB9aQ/e9c0obH
v9RTIEJz/e5p0h9DS+YD05FN/OgdhdwpmYf1pd3Wmfxe9AgZqYTxn9aTdk+/1pd3X+1ADGam
547896f2zx9KiYgU7MbEfjtTD85px6+1N3Z7dfWkIYzf5NNz+VOLYFR9DxwB3piGkbvqxM8P
xj3p7tzTNwppWC4xsHtUYz+VSMdu0enpUTfN05+tPmKuK74bt+NM6r1oYYJ90nNMZsCoC4Fs
fSm4GM5FIfl0K00103cViYsM/rmnk5pit+FGd5/qKSVzS/ceSM08Nz19qi3VIOvXjvQSSh/6
08Nu9qh37vWnjr/SgCbd9fS16+39aaG+t0U7u9FguPxtHfmp0eP6io/4aPM5oFY1/i/C135P
vVfz0npXAfEf4p2/h00eGGRXvCP++a9iW7G545+I2n+C7ZzJKGnP3EHJJr518aePNQ8Y3+Z
X0znZGM4FZWsa5qHiXUyz0808nAQd816f4A+FqWCR6hrA82f7yR54WrtYq/Umk5jl/A/wtuN
a8q91GMW1p98R92HrivatK0uKJRa2EaxxLxx3q1bwz3sgWMbIs90ldXYaZFZIGbrUu8tTdky
IdJ0VLRPMc+9Wbu53/KtNvLtidia4ApbW2LNz+dIknsrTf978a1BwoFRxjYuKc0tDQ0ybuKU8

mmKD7+10/ioESA9aVTnH86j7n0pyH6Urf8xISKbkD3pB83+eKTr7UWQrj+gpN3zd6Q/h+PwK
B/8A10WC4/PrRRu9KM8DnNMkQ/NTs9Kbnmko0G03ZNNWT5f60E7vajoaVgbsI3ymnBu9NJyf
8aN3pxSKAngt3FDdKU+mPzp1A0rjsbQBnNDj5v8AIqMtn0Sc0/06qMxKdtFIn3z/AFp1KxVx
pPHPT3o0CeKcTmjzB/kUhjTxnvTqQdPTF0Bx/wDwP3FYQdaXoe/0pCccfzpu6iwuYefvetG7
k880f1TVz+1Fh3F4NBGKQj0aWiwrG9Jv/Ohu1M3cdc0WHcfyWpaRm2ikDYFMQ4t81Jwx6dKa
/ekxz60E3HDg9aN3zUxetDORQFh2/B7/AIUZ9vemN7U0cjp+vWgQ6kb7tJSZHNMBajY5pfMp
m7p00KQ7jHG6j+K1Y0zp68d+tAgZc/4imb+TnrSt+HXqKYW5q+UdhHOTTG6VIzf/AK6rydFT
61PqIKY20350rN3zxUSuCF8A0ar1HYVh/wDrphbjvSMcv1+v1pPMqBCZH+z1qN259j69Kfnd
Ubcg4qrE3G496KX04/zqN/u90vcUnqVctA5pd22mFuKN34UkzX1HgCnxbkdaYD+P1oAwKCSX
cTz1qSq68/Qd6n3ZbnIoHdDweflWkK3/AOFQBuM5oLcjr9aCScvn0pPMzj+faokfdXBfE/41
2/h0yNvbMrXso6Z5ppEtifE/4o2/hmzks70UPeN/d7V83Xt7c65qQ8zfc3VweOn5Umr6jdan
eZkb7ReTN8ig5r1zwD4Bj0CAX99+9vpOnog9qqypomK5tyb4e/DqHw1H/aF8nm38n/jtehW1
nLqE/wAwAQfdFR6fbPqM28g4z3rsLK1S0Qd009Tu7s0WgtjZJYx/dHH6Uy8vR91ajvLr0BUN
tB5jAtgnrSeoyW3hmj7q2Y12DFQ26BPYqf10aBEn3T3F0zu/+tAeaeBmh6jJ0hpw0fb8KYX
4pd2fSgRJ940u4VGDk+9G40D0Hk5H9aXh/Y0wjIpw68frSuUtByj5yc5pWPPFND4ozupkDid
vrSfSk+9SgdPWlcv1QHj+dN7d03a16jj9aDyeh9qLfgDmnqb0FDH5qRNxCyt/gKXqKEXn3p
Sc0BcTqtNz7fnTi3ymkB/UZzQFhKQncf4ac3Wjt/jQ1Y1045TTWk+X19qVfTFIF3H2oHoAGT
SM2RS/yp1UiR0nUUY5zQ3Sm0/00cetK47EmT1POPWkx+NLn0Pek4NIYvT2pC3zCm554GaKdh
XF3UMcmjt/jSY4ouFhd1M545pMjcP60dfxp3I1HE9aQPmk355oBzQUPJA9s0nrXtd+TRSs04
rdaZSE4pN3BpmY/v0pN23sKZSdfx9aVh3HE9fT3pKXPFMBapiA98dabu9/big8dKQvtb/Gn6
gITgVC1PLEf/AK6jY0h2F3c+1M3f5NIXBb0pCcUnoC1E/GmMd1Dr6UxvvcD/WmIa53expjfc
pzEc0wnHXP070DuNyPek+ve1Hzf7PakzhqbVguiKQkHH6Uh03p0pZPYZpmeaQhxOPSos+1Kz
f3ck/pimu2eBuwav1HY1Jwcc8d/WgvuNMB4/SpPvdKha12tuPz6U/wBD1+nNQiTnHPFLu+Y+
vrQTcmp2/j39ah3i1MmKAJC5J+nak3cdcCmB+tY/irxRB4V0p7uZwMdEPU01vYTDjP8AiF4+
g8G6U/z/A0lycJHXzNrmtT61qP2m4fzLqU7fLBq54m8UT69qNzqV7Lu3j90h7e1dP80PBf2x
hr0o5x/yzjk5P404pRV2YNczuafw08Brpy/2tqYDXEvKK/PHpXqN1YvfTqW6eg6VBY2xvCNq
4jHTNd1ZWotExx6k4pN3dzr0Jb0BbaLn73HamX1+AfSorU944P41TiV7iT5vWkQTQIZ33dvv
cVt2sW36Y71Db22wdKtJx9aCrskp++oi3H3qdu96CSXduNL6UxTwv3p3UUCsPozSA5p5wK
Au06n1pd3tTd3fNLU+b2oGLTh941EcAU+gvmHbuK0+abS7jQQ0z0zS7zSUHpRYrmYuecYp3A
+1N7+1LuBoHyjc+nSjPzdaCc0g00/w1YVx26jPPWkozn/wCtTJDNv6UdR/SmH/d/xp2enrQA
5WzTR/k0bvmoBzQAU7/a/Wk3ZNJ1NKORxQA77xoftWamFvm6n2qSx69Kdn5ai96eDmgBS+M
etHmZH603PWk38U7Cu0Jz60EZFN38ds00NTJH7jSU0H8qRjmlYq7HP0pnX/69G7n2pudw/xp
kjw26mBsUb+aMkUEjgw9Tn+VBem/nSZ20AP3VGzdaXzTn2NMkbd+NA7i76UYximA7aM8e1Pf
YQtNPXNOL89aj3ZJ9qQMUNx7n3prNSH17UFsj/2YUAIe/UioiemKkJx+VRtxQAhfJuwRz07
UjGkZuTg07hcZuGB82aaePRvr0p7H/8AXTHbmkUIWz0/Koi30M5+t0f9femlu1BIhbNR7s4p
z90+KiYN2/WgBSc9/bmonJ3f0pzHDCo2kqrop6CK4IHDfjTP1xxzSpu/wpjvxx/LN0JN7Fgf
Nz/TrUh4PzZqu0cD+d0D/ePX2qDX1JG07b961Xn/AAxUXUUF8emaCb9yZ2x6Ume/Q/rUG4k1
IC0vfrn1p6B6jb6/i0+1e4mdURBuJY183e0vG58X6q8sjYsLfpg3GTW/8W/Hn9s3v9jWT/6P
H/rGHevN9L0ybxLqH2CGPEK/fkPAqoq6uY3cmbvgbw1J4ov/ALXN8mnwnj/axXtlnafaGW0J
dsI4AFZuh60tnbw2tqNsSDaMd673SrFbWIN9709aTlrc05UwtPsUs4fe1vr8Ko5/4DUN5e/K
QH+uKoQxNPIrZ6n+KpGWEVrp+e1a1pD5S1Hb22x0/rVv0X6duaBWJiR00RUm6oQ/T3/KpFbd
7UalepIG3e9S5+b+tRUDk/e/SgRKv3qkwmEgD0po47fjQBP1NL/Ko85790KUY5oAUt/On/eb
P61Hup26gB275aN3zVHvp+ct3o0GS9DTgfxqH0F9vWng5oESfjs59aj6+1BPPTPvQ9RknUd6
ToKaTikY54oCzHbsig/KaSmhuevNKw7i54pwb8aZ93/EUZ6c9aZJI3SgcHFJuNN/ioAVfpRk
BqCeFpSAZPegBaeMVFT/ALo5xQA3n/69JJ97mn1s89jxxTDzmhq+w72E39qXPP8ATrTdu3FL
uFagPT0poP8A+qi1/01Yq4v6d6QnmkY03fk0xD8+1L7enNMLdKTPGKAemwY5xSk8/wBaZ5m/
mjOP/wBdAC5A7/m0tG8E9DTGk+f60xj+dBNiYvKdeaYzfjTOP6mgn/8AXT0FYcWxR/Gcdfem
ZHIpd3Wk0wbsj/a96X+I1Huz700+ev6UBUYzDfWmbju/wATRnDcGg/d+vemLrcXdjH9ab60

0tk8UmfmPNXB0wrdKYec0nbIpm7Ht25oHYc569ajLYpT8opkhyff3qrDE3bjSMec8/jQQFJH
+RTSfmqQAnI700nnpSbtXppP4/SgAbrn/wCvTH044pTx2/Go2PHWtgAj0Dkj6UxuR6Gmt/k4
pP8A0aj1FYH9dv40xuvXimu2e1RiTPXrSasDR0D/AMCxs9fUds1Hv47/AEo+6Rz+dSW1Yfvx
kdz6daC7dD29ahkPynH60hyD3ND1Hyku7I59a4j4p+Nf+Ec0hraJv9MnT5QvWuqv9Rj021mu
JW+WIZOK+Z/FviVtW1q41KUKqP8AVgnIAq1roc1RmTfXsq4hVvNupTk8d816z4A8KroenRlh
/pMwDucc1xHw280nWLxtTuvnUH5FY/4171oG1hcZXHvRJtaXNIxsrs0dH0/y03ngrzVm8v1j
Xa1R3t4sK4GCaowRNdSpv59sUnqMnt1a6Zc1vWsP11XtbYQgDA/wq4rDb7UgSJS2T93A9hT9
2SBUVANDBLSuWc57H86fuqFG4xT8c+1A+UmVt1SIep71CDnvSjv1B/2qG7EpXJt+aTd71H13
dqd+VK47EnmU/fvNV/vNgcfw1Kc9qZJJzQPXpx6VHv5oyaHoM1JyPXPrtTs44qEfiPe135NK4
7Eu7PX8jUm/PrVfd14zUm/A+1MkkU85/CnA896hMnzc08Hb0/M0PUZIj5x/Ogtk1FuHvS7qk
okHIx1pAf/103JBpVruwvpVEC5z3oVsnjn6UN9TSbvmoAduozn61H07cD8KcGpXKsPo39+aZ
v4pX6UyRN/607cKib8xTw1AD92f4vak6tUZy1KTn1oAe3+TTd300KGP+TTCcHHHNKxVxW4+v
f0pc/maYc4pPM59BTJHK/jSbtpozXTN2WoFcdU//AFmkZsdvxpGB5vekJ3GgYdWoVyo9qN20
BULtzQBLnJ607f115/GoQ26j0ce9C1GPLZ70h69vqaaW5pd2Bj9aNQBjzn+dLnj1qIsMf1o8
zf6jAxmgmw8dKazcdKbuwKa3Xr+Gab1HYcDgGLY5qISZppbPvzSAfuyT7Upeowee4/nSZ96Y
WHH5x60xutNL8CmLuM/yoasA4n0PpTWwR7U3du/xoPb/ADmkA5znnNRkYNKTtpm5AcblJ643
UCuJ1NITn8Kr3F/bW2PMnVecVGNvtJBu88BT3ouN3LTnKVG3z9z/ADrGn8X2cMgi6k/5zUV1
4ys4YiUG6TH3fenzBZm05x+XeoS2f61yT+0284jZhffUvT8c06AQFR3z1zSuKz05x8xGf8A
9VR031A9fqa87h8e3ECncQ2e5r01HxZNfTbizHPHHQU0bQz1gnHQ03dk9cn1ph50ev1ob7tC
0KbuIWBAPxk4zUTE4/Sq1/epYwvPJ9yMZNDd9hbannvxj8S06Q6JbSMjTcys00K8bmtv7V1a
206AZG7ae01bWsau2p3mp6rPjc2UQdsZra+EfH83TzX8q/f0U9ua0jH13MYrmZ6X4S8PpbWk
ECgqi92rrbq7FrDsQ+1VRt0y3j6eY3vVJFa9nGTt/wBmoepqW4VN7N/hXQ2VqIou/XkVUsbN
IB/tGtENhAM80hkzdKd/FU0eP604Nk8frQTYm/ip2eaip+40DJF0Kfnj73NRA07dz6fWgCb0
6nbhVf09af17mgqSJtxpwfFQMqp/rQGzQSWFPN0X5m61Bux7U5XzjPrQaXRMeFrRvz3ph+YU
ZJ9vagzJSdp9KRev4daZ94Uj/dP9aNS+Usg9KWPP/wCuq+/5qkzhutGpJNu5oBzUPmc+9PDZ
JFAiTDy010z/AJNQhs+1LvX6fWgCRvS1/i79Kjzz/jSH1sfrQBJ5mW70feqPfikLjHfnPQBL
upSMt1J7ZNRlv053GLDY0Acp9KUn/PrTA+KM8Y5oFYceR6UHu03rUe7inbzQMkd5pC0frTA2
KQSFNq3YaVyT1/nQX009Q5BZfu/WhW4680CHMcYHr3oHUe1G7mov4uPzouOxJk7f/r030eKY
Sce1IX2m1cLDw2VxRUZkzTd3vSKH1+3b+dQs3zU7II+1VmvIVbb5wNGwr1kfKGxS7vyqpPqM
NvHuaQYFUx4js3JAKGKOZD5TTOk0361k3via1tBuDb8HoBxVGLx1auMSYBPb0o5g5WdGDmmu
d571yd943C0BDtxjrUEXjz9wN4GcdUk0YOSx2eT/AHaVjk15jd+NLhpWPm7MY+70pJ/HVw8e
0vketHMPkPSW1TdjePwamyXcMUe55dnvIj4hb/WB/xzTJ/ErTY3FsN60uZj5Uesx63YyM22
cA1Tv/FdnZPxmT2FeSx6xMD7dfxpkmP3Ex+Xdwa0ZismesR+LrN4fMx16fNWNee0THNHUH15
rzv7ZJt/H1qB5ZW7k8YqW22TDXPSPHv7hiu3p19Kx38bSrJkScEVxbu3HPU70TWKCCQM/z/
AFqrCcrHV33jGW6jxuOP96s9fEjof1LDtk1hH3o3be3yj0PNNA2aF5rb3HzE557nGKrDV3+b
nbnnmq/3j0am7HGPk45+b0oegXvu0e/kPrz+VNN1J2/Wonf/AFYbA789zVSe/iU7pZkjwcZc
4xTvpYVwZJc5/nTPmXA+98uN7GqEviDTYsYuc7u+c1mXPjDTIJNiTlZ16Vm5xvu0z6G35Z/
2+euKaE5Rud9ctcfE0wQHrSH6VRm+J4iR1WD1HfNHtYh7N9j6tLZx71G8gA0f8A69NzvXrk
g1G7ckfLnpWq0G3cXnPr+PauC+Luvmw8P/ZxkSXTeTxXbF+P169K8U+K0pnUfGKxKf3dnDkg
Y9etNK7sYyfc4TUYHk1i0+LkyEIa+gfBu1Q6FpdsgXZiPjd3rxXwRD/a3jRnZvlgGd3XNe2S
XPmIAP184INaSW1hrRfue6a5nbit7S7QRqD3P61laPZCVvNwCK6CMquFhr6VmNF1XwuKdnn
t9QagR9rU/f0pFFgPm1DbvfHc1AG5+8TmPA+KB2vsWA3ShWy0/41BkgUobB470CLBP8A9enj
r/WoFbGRinK1BalcnXrSh8Y4/0o9/sB+1Lu96A5STcWpykZ9/U1Fuxn0o380r6CsT7vm9c0K
ecc1CDgU7t15pj5SYNm1LcVCX5x1+val8zpQHKSh/SnI+f8ACoffP5Uqycihq4k7Ev8AhSh8
e+Ki3bsUFwaB8pMP9ZUhp41CrUu75aG7BykobmnE7vY1BkBu01Hme9BBN/X1pXfHt7VF5mc1
E10gPLC1cv1LRajdg1B569d/HrVU6xab/L81d2fypJ26hZM0d9Jnis+XWLWJCxcYqkPF1m7t
hu1K6Ksb2+l3/WuYuvG1vbDhd1VU8eI4ywxRzC5Dq/Nw3171KH2j1rgtT8cf889oB6U2Hx8+
za23Jo5g5DvXfH096XdjoQK8p1DxdLPKCJM9+010bxrcldjE+1K7BxsehyangtWqeYvJq1Le

RQJvaZemeeteLP4heaTfn5x6VYfxHMysN3HtS1Ksj1NfEdpLJt8zHNQXvimC2HB3GvJP7VKT
mh9VklQ4N0z3FY9Pt/HEE27ftSqmpenlHEK9fWvM/tEiqMFtoqKW5d+5/PFIG7HpMXjv91nj
f71jX3i6eRjtcp61xnbm27Y7fWm7id3IyexNK1g51e52v/Cbz+XgvWPNr0jzo2e+0uK58Pj/
A0tzSl/m4/8AHvSmLn7m3L4kmnBHIC8nJqidYkDfKzr61nsV550T6ilDHLcdaA5y+damkU9c
nvVcXso6E1VMvpwe9I0+wf6xE4/ipXGrssPM7dzz6VHuYk/NjHaqE+r2sJ+e6i69c1QuPGek
xf8AL4P949KnnQmpG4wZ+WYRjpSdlHI+WuWuviRokP8Ay1f3zWzd/FjTYt/lxPMfb0pqomOz
0+/dj0D/AN9dqC4257e9eYXXxkU1PKs1+b+dZ118WtQu0fKjjDD7pHSpdRISj3PXmb/ZKj1b
vTg/8XCp/dY14bN8TNYnUAY+UDzx1xWfJ4t1abnznGVyfpU+08i+VHv8k0cIb50QD1brV0XX
bGJvmyYxjsa8F/ti8mbmSXr/AHjUU9zcy85LH/exWXt3fY0VXvc9vuvF+12//LypbvWfN8TN
Gtn+XzJs3e/0ryPa+4nnPTc3JPtS+U6AAMVGOS0tZvEs15I9T05vipat/qzZsD+/wDNvqjN
8VbgRjy7RGb0auBa2ZN5XnHzcGoZLZtib50vvWLxDfUv2a/10vvviZqjs0icdBzms258e6hK
SBNgN7Vz7QBsfMT3G6g22VXqKXtvMSXLSi7ceK71/wDl6lqtLrWflz1+bcxyaj+yp0+8RxT2
gT7uPzp0onuHKYq+oM/8BP8ADub1qIzyHucep9assi7+nINN7dh/Fin7RLYzteRSZZCvU/3e
ab5b0XJNXfP7HHXqabJLnPP0fTrVe1dyvZpo+6i3bPvTJjxTQ/b5iAcfh60yaXaoz3r2TkGX
E/1RnPy4/Svm3UbxxrZVNWvT95pj+Ir3jxVf/AGLRL2b5cCJuX+lf0c+V8N7sn5lyxzVQ1dzG
S0p+E6E3N5cZ+83JPavW7KP7V0q9cfxGv0fhVAE0AvnluAe1evaJbC0Le33y0w61pNtSNuhr
WsapEEGM/pVpT/vVWDe+cetSo/TjvWVw0LKsCevGM0vX8PWq6ydcn2qX7wpE2JEb/vqpPMYr
1qD6/nRu2fTONxoGwd9PD/L9R2qsCCv3waY99BDw04BxRoMvbhnPan+ZkCqX2+3CZ8xduKot
4ntFkx5nSi47Nm6euccr3Pamm456HmsKfxfBxrndmqEfi6F58NGcepPWobNFqddHKWIqchFc
ZL4ujgi/drlhTLfx582HH04pXHY7gHc09LnI+6ea891Dx6S0JPLHY1DF49m2Mu/JPPNFwsej
78ffYCl3KNp3D868nu/Fck7A7yPXF8WYLD95gfzp3YuXQ9S0p2sb7f0CsaSbUraIbt+e+a8
dk1121398cYpZtflYNlj+FJtjsj1VPPFm0m3IOD3pbrxRaW0WVbz0fzrx7+1Jd33uaZJqUsn
X5gG9KLPqK+p6xB43hc4ZQtRX3jdEH7vv0zXLSXjnd8zAfWkadiT85/CjUeh6cvjw/x49c1m
3vjSSvtvha4XzDuPLfnS0+5qQ3odv8A8Jw4jP77tnrWbceK2lkDbzj1zXN07Sevp81M1IBH
TB754oJ5kdQ/i2UrxJj6tWedcfzt3DEcdKyX0U9+2aXdvkC/Me2SeaV0h3NWXZGH8T/AMOM
1XGoyY3k4PfjvVJ22Ht9DT927d3460J3G2TSXszdfzamrcyA9eKgEihckq0/PrUM19Em4STR
/nmpcknYSZcyzHkt83+1xStlWJDC/nWTP4h0+D792n1qrceMtMh0w3X1qfaR7j5H2N0tkf4d
M+1M6qv38jrk4NcrL8RdKjC7GbHXDCs+5+KdkVzFA5wcDPJpe2ggd0fY7z7p47DgZpd4J4zm
vN2+KLZby7Q59/u1Rn+Jd+cY2Djrj9azeIgi/ZPqer50cqp579qYcnq0e1eM3PjzVZF4fjjn
1rPn8V6n03zSvt9UNQ8Sug/YtdT3Jp1jxuYDjuetUZ9csoj81ymfrXhsuqXjsN80vHuailTS
/wDLRmHYu1R9Z8hrDre57Xd+KNMgyxug6j+4c1Rl+IGlJ8o1/UV4wQ+P7v1GDTcbj93sPfND
rN9R+yieq3HxU07/AJYxv1Kc1lz/ABZHPk2WzqPnrgDDv7/IT37Gm+V82Pmz/So9tbqCptna
XPxX1B87VH+zx0rPuPiNrkzb/PXhj0HUVz2Gy20e9NwcjjnHe17Zj5LG1P4v1m7G37XJ/e/G
s1tW1KUfNvZ2yTvGacORjn8aXymccEnvUuvYTg5FZvN1YjczE87jzTTbv/fKjrjtVz7PuON+
30SfMPFPjyBj5e3uKXt30GqKb94pfYQ40RuFPBNSpp3zvGNu3ZPp0qcyF+hHFJ9pj53NjOGz
WbqzNHSg3qRfZMRgZLZH4VKbSPA2JgE/1TPtEf17YyB9R3oN2B1G76VnzSYOME0eBcn5eSe1
P8tdp284/i61Wa+UL1wc+1VzquGxj00enFFqj2BcqZouGQk4J/Sk4/iQbvRjWudX3p6Z7se9
Rvqc5b1AB2y1WqM30Ic4pmz5oTH44yaYdgk+Z2Prz+NYv9qfv0B0GCR60Lekv8vfDe9X9Xkt
xe1TNpw4ye9JnjaP8ayPt7kPypA00ntUK3sh9Rn3xihYeTBVEbZfB+7jmo1MjZxhfaspZZF
b5iB6ZqNZJcIMmn9XfcJVEbG7GBxx/eFMAZAJZfJGP4u1ZLeeyj74490TUGsJX5PyZan7GK3
YvaN7F5rtBv2EnHOTVWS9VeTnn8c0v8AZrNyT+VRtp5H04Kem7iqUaa6kttta2D7aADt/Immv
fk7iI+2Txikay/efeH0p0dqjD5vm+tav1RF5M+693r/31miR8r8vb9K831DxVLcxAb1/Dsao
N41njQqkp3sPWvWV2Zcps/Fe/WHwjdor/OU9fevFfEMnlaHaxNtBP03G0cV0PjjU5L60RG/e
bmA/CuU8ay+XbWabuemfT8aqK5Tl1dHqnw41iyt9GsIpm+bbuZa9SGu2Xkh11UjH8NfMWh3z
W1LARuHVs967fTtda4jERf5170SetzR06PWX8aQRy1Mb+akk8aWyf6pTz6/yrykX79vzNTfa
2k4JHB28+tJ6hynocXj6cSfMq+XnlaW88byMh8tinPWv00lc8bvbJ9fegtLt5fbnPT1pLzK0
3g8Z3can96N5Xqagv/FUtzz5r/UVyOPm4IPqe1P8wZLYwenrSdlsUlc60LxK8CbPMYt6setV
bvXjk289sfd9axk3bv+X/wDXilaQcDcB2NK6Bpmydb1XpkmoP7UbnJ/M1n+YH+ek83GeQ3G0

nNFxwF0xqEzDy2PQfUVGdQkB69KprLjn86M5QdPrTukFr1/7S7q/JKnu3c0J00fs023rWe1
18ifMPfcf1q0bVIU2b7mNVPg8NUXRoaHmcc8U5yfUFqwj4kso1y1xGG64J71Vm8a6Up8xrvJ
HwP50NJvodIAzZ6fjR1ZGC7skc4rkZPiFpaFiNxwePeqUvxRsVk+SJ9ue55NL2sdi1Ta0+WX
rjtx81KZtg7mvNW+KWfmW22/73aqj/FG8Kb40jX/AHqTirR6C91LoerGRsYH00DtdJhu4I/vH
nGa8hb4h6nIxPmoqk1R18W6rdf8AL0/J+mKzdZLoP2Xme3faAh++p7801r+JSd06Dryx614Q
2uXsj5a5kbk8bqrfarhh/rZH037pc1m8RFFey8z31tdsUPzXsfvVKbxhpFurM93G4HZRmvE2
kbqWPsc0YU7uRk5GayeJsaew5tz20X4k6LCHxJI+z+LGKzbn4q2GzMUDyDP4GvLT8u7pn1FH
r0+m0aTr3BU11R6Lc/FjP+qtSP15qm/xSvzwFUcY5xXEbySMgcnA4p20u2P/AB3FY0vJ1qmd
RN8RtTk3YfaPbiqk/jbVZy3+k0fXHQVimFtgyAuM4F03hB2x3xU0tcp07Mtza9qNxnM7fP8A
hURv7ht26Rie2GPFQeainDFcdevNH2yIr1+tRzy7F28yRpm7/wAVK51xuPJHfvUD3Q2noA0d
1U5r3GQx+ccYqWpSFc1DJ17+x/1TH075d42dMisxtQAPrzimLeb15JXPHzVSp0xHtNLWNRVG
ceZtwewPNNldT3G0VkvcsIMr83qWNQmV3K8HHqeK19g+5LnobogdA46N0PtURuIwwHc7Djqa
ySLjH9c1IIRjhx29an2SXUHVk+hp/a03ntUjvE+bHccGqKWtyP4+M/dN0Swk5yQPqafs4fzB
zstC/wDm/GnG+ZV690aqjS3XZ8x3FetSf2aMfeJ/nSapole0ZJ9u+cen3j701tRUMM/e9qhe
xRuN3zeqVK2noTkMDz90UWp9R/vFsR/2kEGT+eKT+1QMj8Aw4NP+xrsz/wC00v2eJWPoe2c0
70uxFp3IW1CTbu3bPwmfbJmf77H3TpVsIF6AemWpd6LkHYMedD+dTzx6I05WV3muD05z/F6V
Hi6YNu1Yk/pWglzF5fI7dd1DXUe/P8NL2jX2RuF+pQFr0fyxnvUn2DDbi2enOKs/awRyffK1
HJeqf13Lz6VXtJPZEuKXUjNsT/Hnnk0ySyz8uWz65pf7RDNjdntgcU86gMFiy7uu0e1P950R
DjfqVzpJHgyMI+e9PXS87huzj5sVHJrAQ4Hb+/T1v/dPU5rRuqiFFdx7HgZT0z0/CnGwhVi
VG4n+KkXUEEu00mfiKR9RUZxgH3qP3rN0VLRj/7PQYxx3DEZ/Cm/YYwzYMYz2qv9p8w89cZG
TVeR9+DvbaDnjmtFG092ZppdC8baPnDgAUmyDd2Jbu3assyux+Ykrn1zTfLdpep2c/UVv7J
21kZSqW2RqNNCv507zcd16Dtn9ayo4XJA0zj+7TmjYHJJye9Hs13K5pNGqLzhhu2jPpUcuoh
cZI+tZxtmkz/ABfWmNbsB8uP8KXsYX1J5pPY0G1BMj5u47VWkvvMRfm3Y4PvUudv83Y1e5pV
i79sZyvNHs4x2K957iteHqB7Z96ia6kwNjLuqWS2AKJLfJ/Dt70mzacL+ORVJR6GbTZ7+85j
+fcAR+VVpJCWyMN23ZrPutdt1PMqY65qhL4lsAw/fK5HevRfmPlE8Sni0XdgKy/frC8ZuZPK
Xd90dW7fhU+pa3a61LDHDvdw38feqXjKXEygmcf3uM1cGkctR201WwxpNvNEcfu8nHfiore
9CyD958yms0w8eSQW6xxwjdgAu4t0rP1HxidxF2A2LncfWs/axjoaqDsenaZqH2tBjGecrV6
N2LgcbfvfMR6V4pF4rvF1JD1cNVka1qEsanz23Y7cVEqqLjSbPY/P3jG8Z9G4psmpRQzNPD
7DPNe0y6hczN800jY9ag30x+Y1TuFYSxFjRUZ2CTxBYJ1uo/rmq03j0xjz/pW7pla8sMbZAI
DHdjRSGP5ueeaz+sGrp2PSX+IWnxcbyHPzA1U/4WLCF/wBR36tXBAdM44P8NLgZ/wBYM9az
1Xkth8i00ufiVc7TsiCr2FVJfiLqTIdm373Lba5X5Rk8fhTTJEx++H2EKeeasqyFydzom8b6
q7/LLwexGapz+KtVaRs3WB+VZCzxcjCmDruzStfjC/Ln15qXUm3oNJWuXJdSvp2/4+Hf0BNQt
JcH7zkj35qL7ePfHYfzpv29TzjqfWovU6mqcUSBJScHaFQN0zTSh3/ez2ANNN45H3cZ75qL7
W/I7Z6UWqMi6RZeIyuC23dnbk+1J50B/rEH86rRzy87k259f504yy42jgH+8KvldtwuiwUJR
sMMhsZNPf/ZcH+tUcyEk9WPdu0aAJXJz+WK1wfcZZD8cke1PGHJywz+dU1glk445pfJ1wuQE
Y/1TcF1ZFmXV03b8/H0oDgIAWyao/YmC7dx9Mk1LHZbuCe4P0rNwi+pXM72LaXcZ/uuAdvHF
MW+By0o+ucU0WRb+MZX+VibJWbms24XNdSU3qJx8uR+VMOpMw+6fc+9H2NVT1UxmNnapuxjt
+FK9PqHvETah8u7gdqb/AGjcep7+9Tm3Uk+x+1PCb/40T8/HizTcqa0sK8nsVDf3DfxCmH7U
/wAqv17mtDygnj257U4/Ifl/wDrUvap00Uva+7Mie3mZu3XrTvKnPH8031+Za0tz/NkAgdq
eu3z0h0ezVXt32IV03UzPssskZHyY3c55pRaScZf61oSTg8cAZ9ajM5I4wM1HtZB7PuyunG
Tq8Z5z06VILJoiP3g6U8z7VXI796at1sJ5GfQ0+ec1uVyxQ/7MQq+ghVfWnew2Rk4B9earSX
eMJjv1amfbmHHAP5VPJP4vduaEed79D/vVEzEFum/HeqLXzE85XnnnrUS3j7hycGqVGRlqp
aGkZ0Qd3v93NN8zZ3U571n/a3/uj070aTc5I40T37Vp7B9x0or6F8XYDfK6/hUjXXzZynH61
m+URx5fP9/8Awqb7NIPvDrSd0IKb6jjfeVnkZ9DTW1DJTHCGkNm/U/3utLHZDd/Rs80+Wmtx
XkQfa3Q84q0S91IG373f2q6LMd+/amx2Sdxnn7xrRSgjNqXR1H7Q752v1ume1RNcSSHG7vWq
0Cr/AA4JGm0oj45QJ22nvVKrFE211ZkxGZ1759TU5D1uPmGcGtJIVAHyjHUZ7e1SbCp6DPuK
j26NPZvuZKWsjdge3FJ9jm9eepbHnapbc3y4BHG7pSu7N93P07Gp+sPsL2VldsYxYvH9RjH
HJp8tmcMP4c1eabaSCfL+oprygr1/0mqS2Hs1YqGzyfujk0v2LzWG4r/AMCqyJQh/D+LnNRi

4w0xxQ5z7i5ERfYto+U9KabRVlGR3qYMSMDnnNI1wo/9m71d5l0CIRApbBx/9emtEjL0QfTu
af8Aa0vI/Gkaf1wFzwafvCshDHs6BMc9e1N8veA3XHGaa1xtyBgZ0c0xbjbuJYHHdqu0iW49
R3ynP3Bnkb0tLh3ZR+7Yb85eq0k7E9se10E5xgVTTRPMi15e4hh/+umgFRgSr6VVeYlm/hAN
L9rZ2/hbPtxS5X3HzRZY2NvPzbF0bM0f4uwzVXz8oeMLjbSNPtJ4wfpVcjZH0iy30fun+LI
NNZtxzkH/Zqv9oww+70xTWm2D7vHrmkoN9Qckz//2Q==
-----AF99D97BC0A2B250F000DBC3--

Date: Tue, 25 Nov 1997 14:25:49 -0500
From: wb8ygg@juno.com (Bradley S. Mitchell)
To: qrp-l@Lehigh.EDU
Subject: [31311] QRP Rig Light!!!
Message-ID: <19971125.142551.10974.0.WB8YGG@juno.com>

Well, I got my MK-79 today.
We ordered these things because n2jgu and I burn up batteries
every year operating the rig for field day at night.
So we thought that this might be the ticket for field day.

All I can say is that this is a pretty neat little package!
I placed it on top of the rig, and it looks like it will do the trick.
Ok, you know that I opened it up first!
Found a neat little p.c. board inside for the parts & LEDs, a couple
of aluminim weights in the back, for weight.. quite a nice job.
Normal disclaimer applies.
Thanks to John Roblin for another neat QRP backpackable item!
I think this is the proper address for the MK-79.
<http://www.west.net/~wpc/mk79.html>
73 All
Brad WB8YGG

Date: Tue, 25 Nov 1997 19:41:33 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31312] Re: Next NORCAL Meeting: Hitchhiking?
Message-ID: <347B29ED.5498@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ed Loranger wrote:

>

> QTH Santa Rosa, CA.
>
> Is there anyone going through here on there way to the next
> NORCAL meeting. Am hoping for a ride.

Sri, should read:

> Is there anyone going through here on ^^their^^ way to the next
-Ed

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)

HW-8,0HR-100, Pixie2, Johnson Viking II, Drake TR-3

QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok

mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Tue, 25 Nov 97 09:43:41 HST
From: mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
To: qrp-l@Lehigh.EDU
Subject: [31313] 10 meters
Message-ID: <9711251943.AA14388@krypton.nmr.Hawaii.Edu>

Actually I think the biggest problem with 10 meters is that people do not use it!

If you look at the MUF maps, you can see 10 meter potential in a band that runs through Hawaii, Mexico, at least the southern half of the Mainland, and parts of northern SA. In the afternoon it extends out to Japan (HST).

Last Saturday I was checking it out early in the morning and found a TI2 and a west coast station nice and strong, unfortunately the TI was apparently working East coast stations and had the beam crosswise.

During the last big SSB contest, I got on the last 30 minutes with my two CB whips on the lanai and racked up 12 contacts, about half JA's and the rest Mexico, CA and SA.

It is dropping off now, but in a couple of weeks there is the big 10 meter contest. Propagation seems to be mostly East and West for long haul.

It was surprising during the CQ contest to hear the masses of stations on 10 meters and the considerable pileups the big guns were generating.

I hope there will be at least a little of that left over for the ARRL
10 meter contest.

Mike Burger University of Hawaii at Manoa Department of Chemistry
 AH7R - QRP-L #1053 - FISTS - BL11ch - Honolulu County

Date: Tue, 25 Nov 1997 11:48:49 -0800
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: W7LS <w7ls@blarg.net>
Cc: qrp-l@Lehigh.EDU
Subject: [31314] Re: Stainless Steel Contacts for NorCal Paddles
Message-ID: <3.0.1.32.19971125114849.00ae6d00@dpol.k12.ca.us>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Just got this message from Jim and now I realize why I thought he was in
Alaska, I had mentally transposed his call to WL7S, Geez. Ok Jim, how
about posting details on how to order your contacts to the net. 72, Doug,
KI6DS/M0BIV

At 11:28 AM 11/25/97 -0800, you wrote:
>Morning, Doug. I am the one with the silver plated copper contacts,
>not the other Jim in Alaska. Still have some, too. 73 de Jim, W7LS in
>rain-drenched Duvall, WA

Date: Tue, 25 Nov 1997 13:03:11 -0700 (MST)
From: Paul Harden <pharden@aoc.nrao.edu>
To: Claton Cadmus <aplitech@Spacestar.Net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31312] Re: Norcal Paddle Magnets
Message-ID: <Pine.SOL.3.91.971125125948.3507A-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 25 Nov 1997, Claton Cadmus wrote:

> I saw a message about "hammering" in the magnet in the Norcal paddle kit

> and it made me cringe.

> 73 de KA0GKC Claton Cadmus

My magnet was kinda tight also. I just wrapped a small piece of emory cloth around a Q-tip and did some gentle reaming-out-the-hole by twisting the Q-tip to sand down the inside of the whole. It took surprisingly little effort to open up the hole enough for the magnet be inserted snug just by finger pressure.

72, Paul NA5N

Date: Tue, 25 Nov 1997 12:01:08 -0800 (PST)
From: "Robert P. Okas" <vintage@best.com>
To: Steve Hurst <shurst@magiclink.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31312] Re: Mysterious Jewlers Rouge
Message-ID: <Pine.BSF.3.96.971125114448.16842A-100000@shell114.ba.best.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

Locating this stuff can be a bit daunting. Here's a suggestion: Find a gem store, the kind rock hounds (as opposed to fox hounds) frequent. They should have all kinds of metal and stone polishing materials. In my quest, I discovered that rouge comes in different colors, with red being the least abrasive. It is available in a powdered format and in a wax stick.

I've had some luck chucking a felt wheel into a Dremel tool and rubbing the stick against the rotating wheel until it was evenly coated. Hold each brass piece firmly as you apply it lightly to the wheel, which is rotating at a moderate speed. The Texas Chain Saw Massacre (TCSM) effect will be observed. For real excitement, try using a cloth wheel instead of felt. You'll get a finer finish and cotton thread will be flying like Nils' chickens doing the badger dance!

BTW, a cloth wheel soaked in Brasso does the polishing job with minimal elbow grease. Fab up a shroud around the wheel to minimize the TCSM effect...

72/3,
Bob - W3CD

On Tue, 25 Nov 1997, Steve Hurst growled:

```
> Maties,  
>  
>   AARRRRR, where might a bloat such as me self find this "mysterious jewlers  
> rouge" ?? AAARRRRR what would be its brand name ? AAARRRR, would it work  
> on me pieces O' eight as well ?? AAAAAAARRRRRRRRRRRR.....  
>  
> ( somethings in my coffee this morning !! )  
> 73,  
> Steve Hurst  
> KA7NOC ( southern Idaho )  
> http://www.magiclink.com/web/shurst  
> shurst@magiclink.com  
>  
>  
>
```

Date: Tue, 25 Nov 1997 15:25:35 -0500
From: "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
To: qrp-1@Lehigh.EDU
Subject: [31312] Mysterious Jewlers Rouge
Message-ID: <8525655A.00700894.00@dpcmail.dukepower.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Would that be in the makeup section or jewelry section at the department store??

SRI - could not resist!

Watson/WB4EXW

----- Forwarded by Watson R Gabriel Jr/Gen/DukePower on
11/25/97 03:22 PM -----

Maties,
 AARRRRR, where might a bloat such as me self find this "mysterious
jewlers
rouge" ?? AAARRRRR what would be its brand name ? AAARRRR, would it work
on me pieces O' eight as well ?? AAAAAAARRRRRRRRRRRR.....

(somethings in my coffee this morning !!)
73,
Steve Hurst
KA7NOC (southern Idaho)

Date: Tue, 25 Nov 1997 15:32:12
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-1@Lehigh.EDU
Subject: [31313] Super Gainer, built and working
Message-ID: <3.0.1.16.19971125153212.22bf6d06@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Howdy,

Not one to waste time when I could be doing paying work, built up a super gainer for HF last night and today. It kinda works okay. Right now it's not real sensitive, about 20 uv's for AM and 5-10 uv's for CW. And sure enough, it does demodulate FM.

What I built is a SBL-1 mixer with a K7HFD oscillator directly driving the SBL. The regen is a modified version of a LM1496 design by KC3ZQ. He used an audio transformer and I used resistors on the output. Half a dual opamp converts the balance output of the regen to a single ended drive for the LM386 audio amp and provides some gain. IF turned out to be about 2.75 Mhz.

I'm hearing SW stations with it now, using about 20 ft of wire streched across the room.

I'll say one thing, this is going to be a knob twisters delight. There will be the tuning knob, band spread knob, input tuning knob, regen knob and audio knob. Some stations over load it, so might need a RF attenuator knob also.

I think what I need to do is terminate the mixer with a low gain broadband amp and that should improve the sensivity some.

Fun toy, but in the end looks like it will be as complex as a real super het so can't see any real great advatages other than it can demodulate CW, SSB, AM and FM. Actually, thats a pretty neat feature.

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Tue, 25 Nov 1997 15:35:08 -0500 (EST)
From: n4js@pobox.com
To: qrp-l@Lehigh.EDU
Subject: [31314] GQ40 WORKS!
Message-ID: <XFMail.971125153508.n4js@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 8bit
MIME-Version: 1.0

After a little minor debugging, the GQ40 works! Receiver sounds excellent. Just checked transmitter for output, etc., as only had temporary heatsink. Sidetone is a bit on the loud side, but guess I can lower that. Now to finish painting and labelling the case. What a job this rig was!

Sent at 15:35:08 on 25-Nov-97

John L. Sielke	n4js@amsat.org	n4js@pobox.com
n4js@qsl.net	NJ Grid:FM29LN	
http://www.qsl.net/n4js		
NJ-QRP #57	QRP-L #884	
QRP-ARCI CQC #443	CQrp #50	AKQrp ARQrp
NE-QRP #507	G-QRP #9544	NorCal #1989 QCWA FISTS #2781 ARS #243

Date: Tue, 25 Nov 1997 12:22:57 -0800
From: W7LS <w7ls@blarg.net>
To: qrp-l@Lehigh.EDU
Subject: [31315] Silver contacts available, again
Message-ID: <347B33A1.24CB@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi, gang.

Doug Hendricks asked me to post this, again. It's timely, as the NorCal paddle kits can use the contacts.

> Here we go, again. For those who are interested, I can provide

> silver plated copper contacts for making keyer paddles, straight keys, etc.
> These appear to be the same ones that you find on Vibroplex paddles,
> Bencher, MFJ, etc. About an eighth of an inch in diameter, made of copper,
> and silver plated. They have a mounting stud on the back, about an eighth of
> an inch long and a sixteenth of an inch in diameter.
> Here is how we worked it last time and it went fine: I can provide a
> set of 4 contacts (enough to make an iambic keyer paddle set) for a dollar
> and a self addressed stamped envelope. If you want more contacts, just
> include a buck for each set of 4 you want. I can provide pretty much any
> quantity that you want. One guy got 10 sets of 4! As for postage, even that
> didn't amount to more than a 32 cent stamp, so just put a 32 center on the
> SASE. I'll put however many you want into a little bag and stuff it in your
> SASE.
> This time, I don't need to hear from you on e-mail first. Just send
> the SASE asap (wow. What compression!) to me and I'll send them back in one
> lump.
> Summary: send a SASE and a buck for a set of 4 contacts to:
>
> Jim Hossack W7LS
> 15221 342nd Ave, NE
> Duvall, WA 98019
>

> 73 de Jim, W7LS

Date: Tue, 25 Nov 97 20:31:40
From: "KA5T Larry Wise" <lewise@inetport.com>
To: "qrp" <qrp-1@Lehigh.EDU>
Subject: [31313] Fox....
Message-ID: <199711252032.0AA18243@admin.inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Boy, it must be time for new antennas here...

No fox OR hunters heard from about 0105 to 0159z

Lots of other stuff.....

Larry KA5T lewise@inetport.com Georgetown, Texas

Date: Tue, 25 Nov 97 15:40:59 PST
From: gregoire@endor.com
To: Low power amateur radio discussion <qrp-1@Lehigh.EDU>
Subject: [31314] RE: SGC2020 draws 300 mA on rx!
Message-ID: <Chameleon.971125154422.GREGOIRE@Gregoire.endor.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; CHARSET=us-ascii

Hello Jim, and Gang,

Just get bigger batteries.
Just one more battery and
I can run my Kenwood 870 at full power
for as long as I like.

I really need more solar panel though, that would
round out the station nicely.

I think I'll ask santa for a 5 kw generator to
keep things charged too.

de AA1IK, Time the accursed enemy of man,
 cursed youth for going to slow
Ernie Gregoire and by the old for going to fast.

R.R. 1, Box 221,
South Rd. Fists # 2644, ARCI # 9500
Canaan, NH. 03741 QRP-L # 95, Fly fisher & tier,
 Promise Keeper.

E-mail address: gregoire@endor.com

packet address: AA1IK@WA1WOK.FN43FE.NH.USA.NA

11/25/97 15:40:59

Date: Tue, 25 Nov 1997 15:41:07 EST
From: Conway Yee <cyee@bidmc.harvard.edu>
To: <qrp-1@Lehigh.EDU>

Subject: [31313] on the receipt of the norcal paddle...
Message-ID: <11251997154107.3N149T@email.bidmc.harvard.edu>

I sent an order for a paddle about a month ago. I remember that there was a trip planned on the part of the person sending out the kits. Is there anybody who ordered about a month ago who is still waiting for theirs? I remember sending out my order about a few days after it was announced that the run consisting of #201-500 had been sold out.

tnx es 73 de Conway Yee, N2JWQ

Date: Tue, 25 Nov 97 15:47:33 PST
From: gregoire@endor.com
To: Low power amateur radio discussion <qrp-l@Lehigh.EDU>
Subject: [31314] RE: Gophers ate my radials!
Message-ID: <Chameleon.971125154848.GREGOIRE@Gregoire.endor.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; CHARSET=us-ascii

<< What to do? I've
trapped gophers till I'm sick of it. I've poisoned them. They keep coming
back. >>

I usually give them little lead pills.....
at high velocity.

de AA1IK, Time the accursed enemy of man,
 cursed youth for going to slow
Ernie Gregoire and by the old for going to fast.

R.R. 1, Box 221,
South Rd. Fists # 2644, ARCI # 9500
Canaan, NH. 03741 QRP-L # 95, Fly fisher & tier,
 Promise Keeper.

E-mail address: gregoire@endor.com

packet address: AA1IK@WA1WOK.FN43FE.NH.USA.NA

11/25/97 15:47:33

Date: Tue, 25 Nov 97 21:45:06 UT
From: "LLOYD DEEM" <WH6CDU@classic.msn.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31313] RE: MFJ 1796 and 1621 antennas
Message-ID: <UPMAIL18.199711252153460659@classic.msn.com>

I have the 1796 it is acuatly a verticle dipole 40-2meters. I used to run a hygain vertical I like the mfj much better. I use a kenwood ts670(low power version 690 (40,15, 10, 6 meters)) 20 watts max I can work the region 5 traffic net, the mars, and I even worked FL and CA on 10 Meters great antenna for a great price.

wh6cdu/afa4ld Lloyd

From: owner-qrp-1@Lehigh.EDU on behalf of CHARLES LESKIE
Sent: Tuesday, November 25, 1997 9:34 AM
To: Low Power Amateur Radio Discussion
Subject: MFJ 1796 and 1621 antennas

I wonder if anyone has any experience with either of these antennas.

The 1796 is a 40 thru 10 vertical.

The 1621 is a compact portable hf antenna.

Would appreciate any feedback on either of these antennas.

Chuck KG8ZH

Date: Tue, 25 Nov 1997 14:01:36 -0800
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: qrp-1@Lehigh.EDU
Cc: wager@juno.com
Subject: [31314] NorCal Paddle Status, 2nd Run
Message-ID: <3.0.1.32.19971125140136.0070bac4@dpol.k12.ca.us>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Ahhh, I see a posting from one who has ordered the paddles and is waiting. Here is the latest information.

I have kitted all 500 hardware packs, they are in a box in my living room. [JoAnne, my wife, grimaces everytime she walks by and sees them, that is why I partially hid them at the end of the couch.]

Doug Hauff will meet me at Kettleman City, California Sunday and will deliver all of the machined parts to me. I will pack the machined parts into the clear plastic ziplock bags next week, and then spend Saturday packing the machined parts, bases and hardware packs into the bubble wrap mailers. Sunday, Dec. 7, Jim and I will meet in Pleasanton at the California Burger and I will give him the 500 kits. We have over 300 of the second run sold, and they are going out at about 25 to 30 per day. Jim leaves for Scotland on Dec. 19th, and hopes to ship all orders received by that time.

Jim is busy this week preaddressing the boxes. Hopefully you sent a mailing label with your order, it helps out tremendously. When Jim gets the kits, he has to put one plus a manual in each mailing box, and then take them to the post office to ship. During the last run he mailed 300 kits in 3 days!! An absolutely amazing man.

We know that you are anxious, and we are producing the kits as fast as possible, but it does take time. Thanks for your patience and understanding.

By the way, wish me luck, the Dos Palos Girls Basketball team plays their first game tonight. 72, Doug, KI6DS/M0BIV

Date: Tue, 25 Nov 1997 16:18:02 -0600
From: Bob Liesenfeld <wb0poq@visi.com>
To: qrp-1@Lehigh.EDU
Subject: [31315] Re: Mysterious Jewlers Rouge
Message-ID: <347B4E9A.62F75952@visi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Steve Hurst wrote:

>
> Maties,
>
> AARRRRR, where might a bloater such as me self find this "mysterious

jewlers

> rouge" ??

I have not been following this thread, but if you want it to polish something, try cerium oxide instead. I use it instead of rouge to polish telescope optics. MUCH cleaner, does not stain your hands, clothes, etc. It can be had from most local optical supply houses, or:

Willmann-Bell, Inc.

P.O. Box 35025

Richmond, VA. 23235

(804) 320-7016

The usual disclaimers apply....

--

Genuine E-mail From the Land of the Everlasting Icicle...

Bob Liesenfeld

wb0poq@visi.com

Date: Tue, 25 Nov 1997 16:05:25 -0500

From: "W. D. Lindsey" <70511.3041@compuserve.com>

To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>

Cc: "W.D. (Doc) Lindsey/K0EVZ" <70511.3041@compuserve.com>

Subject: [31316] FOX Log 11/25/97 Fix #1

Message-ID: <199711251607_MC2-299F-C7E9@compuserve.com>

MIME-Version: 1.0

Content-Transfer-Encoding: 7bit

Content-Type: text/plain; charset=us-ascii

Content-Disposition: inline

Gang:

Here is the first revision, based on input received today. Probably there are other corrections yet to be made, however, so please continue to let me know. Want to give Chuck Adams the best info possible!

Have indicated all changes so far with an asterisk (*).

TIME	CALL	SENT	RCVD	ST	NAME	#/PWR
----	----	----	----	--	----	-----
0000	W0CH	569	559	MO	Dave	618
0001	N4JS	549	559	NJ	John	884
0002	AC4HF	559	549	TN	Jeff	98
0005	W5TFB	579	579	TX	Jack	282
0007	K5JHP	569	559	TX	Bill	825
QSY.....						

0012	AB5UA	569	579	OK	Clif	478
0013	AB7TT	559	559	AZ	Joe	5w
0015	K5ON	569	589	NM	Gary	770
0017	VE5WF	559	599	SK	Earl	1076
0018	N6MM	549	579	CA	Harvey	318
0019	K5OI	579	569	NM	Tim	73
0020	W6ZH	559	559	CA	Pete	257
0022	N6ZS	569	569	IA	George	5w
0024	W2UX	579	579	SC	Gary	593
0026	WA9PWP	559	449	WI	Paul	127
0028	N5ALO	569	579	TX	Bill	415
0029	N3YSI	559	559	PA	Paul	5w
0031	N9KW	589	559	IL	John	1257
0033	W5HNS	579	559	TX	Henry	178
0033	KA7OKH	569	559	KY	Rich	933
0035	VE5RC	559	229	SK	Bruce	886* <-
0036	VE3JC	329	539	ON	John	744
0038	N7KT	549	559	AZ	Roger	62
0041	KI7MN	569	449	AZ	Bob	271
0043	N4ROA	569	549	VA	Dan	970
0044	AA1MY	599	579	CT	Seab	574
0046	N6WG	339	339	CA	Bob	26
0047	N5LU	559	559	OK	Bill	5w
0048	K5TZY	579	559	TX	Bill	473
0049	NQ7X	339	559	AZ	Floyd	343
0051	N7GS	569	539	MT*	Mal	815 <-
0054	N7XJW	579	599	AZ	Bertie	1259
0055	N9DD	559	559	IN	Tom	32
0057	WB9HFK	559	559	IL	Mark	1159
0059	K2VCO	559	569	CA	Vic	725
0102	N7VE	589	559	AZ	Dan	5w
0103	K10J	579	579	TX	OJ	732
0105	AB7MY	559	559	AZ	Gary	571
0106	N8CW	549	549	OH	Bob	4w
0107	K8NWD	569	559	MI	Tim	5w
0109	K5ID	579	569	AR	Ken	652
0110	K8CV	559	559	MI	Walt	935
0114	W6BAB	559	559	CA	Harvey	5w
0115	AC5II	559	339	OK	Don	264
0117	W0RW	559	599	CO	Paul	2w
0119	WB0T	339	339	IA	Jerry	1268* <- (also dupe
0121	N5ZN	449	569	TX	Anibal	736 at 0126)
0124	K5UP	559	559	OK	Glen	21

(Dupe of WB0T @ 0119....so I am deleting this one: <-

0126	W7OT	599	339	IA	Jerry	1268)
------	------	-----	-----	----	-------	-------

0128	N2GO	549	449	NY	Jim	381
------	------	-----	-----	----	-----	-----

0131	WD4MSM	569	559	IN*	Barry*	642 <-
0135	AC6LA	339	559	CA	Dan	515
0138	W7QQQ	439	559	AZ	Jack	1210
0140	W7SSM	559	339	CA	John	1048
0142	WB0CLD	589	559	MO	Bill	279
0144	AB7TK	559	339	ID	Randy	102
0146	VE3ELA	439	539	ON	Ken	1226
0149	N6XU	589	229	CA	Stan	66
0151	W5FN	579	559	TX	Tim	586
0154	W7GVN	559	559	AZ	Rod	849
0156	K6VNX	339	559	CA	Arlen	5w
0158	N0TFI	569	569	CO	Jess	1232
0159	N8ET	569	459	OH	Bill	498

Thanks again for all your assistance with this. I have lots to learn about this FOX business, even though I was first licensed 37 years ago. Will take all the help I can get :-).

72/73,
--Doc/K0EVZ qrp-1 861

Date: Tue, 25 Nov 1997 12:41:47 -0800 (PST)
From: Stanley Wilson <microres@crl.com>
To: "Michael A. Gipe" <mgipe@reliablemeters.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [31317] Re: NorCal paddle polishing advice
Message-ID: <Pine.SUN.3.91.971125123629.18180A-100000@crl.crl.com>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Not sure where this thread is going, but if you are trying to get nice edges on the edges of the plexiglas paddles the easy way is with a flame.

It brings back the color in a color plexiglas or clear in the plain. Just run the flame around the edge and you can watch the magic before your eyes. They do this in production all the time. Much faster than using finer and finer rouge to polish it.

de stan ak0b

Date: Wed, 26 Nov 1997 02:25:11 -0700

From: gsurrency@juno.com (Gary Surrency)
To: pharden@aoc.nrao.edu
Cc: qrp-1@Lehigh.EDU
Subject: [31318] Re: Solar Summary 11-25/M1 flare
Message-ID: <19971126.022512.3430.0.gsurrency@juno.com>

Paul wrote:

>PS - I just finished writing part 1 of a 2 part article on solar
>disturbances with a good description of the physics behind a typical
>solar disturbance with some cute illustrations. It's "in the mail" to

Can't wait to see those "cute illustrations"! Paul, you missed your
calling. You should have been a cartoonist, a la Matt Groener (Bart
Simpson) or that guy (can't recall his name) that writes "Beavis and
Butthead".

Looking forward to the article and learning more about ol' Sol.

72,

AB7MY

Gary Surrency
Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions, ARRL VE

Date: Tue, 25 Nov 1997 13:23:03 -0800 (PST)
From: doug hauff <slmachco@fix.net>
To: qrp-1@Lehigh.EDU
Subject: [31319] Powder Coated Base Polishing
Message-ID: <199711252123.NAA14857@fletch.fix.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Went next door, talked to the powder coater guys...Finish is as on your car;
use fine rubbing compound, then car wax - or just car wax. Apply liberal
amounts of elbow grease.

Avoid harsh stuff like you use on the brass. 72 Doug KE6RIE

Date: Tue, 25 Nov 1997 14:24:26 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "Stanley Wilson" <microres@crl.com>

Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [31320] Re: NorCal paddle polishing advice
Message-ID: <199711252318.RAA12144@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

I've heard of good results with flame polishing plastic parts; however, I had excellent results in minutes with automotive polish on the plastic handles. Perhaps that is part of the frustration with the brass parts. After inventing the Texas Chain Saw Massacre (tm) technique, I'm sure that I could be very creative with flames. heh, heh, heh.

With all the useful advice so far, I may be ready to try my hand on paddle number two, with a red base instead of blue this time.

Mike K1MG

> Not sure where this thread is going, but if you are trying to get nice
> edges on the edges of the plexiglas paddles the easy way is with a flame.
> de stan ak0b

Date: Tue, 25 Nov 1997 16:46:25 -0500
From: ka3eaj@juno.com (Dave Lichtenwalner)
To: qrp-1@Lehigh.EDU, lewise@inetport.com
Subject: [31321] Re: Fox....
Message-ID: <19971125.164627.18254.0.ka3eaj@juno.com>

>Larry, KA5T, sez:
>
>Boy, it must be time for new antennas here...
>
>No fox OR hunters heard from about 0105 to 0159z
>
>Lots of other stuff.....

Same here. What new antenna do you have in mind? Maybe we could start a "group" purchase....

de Dave KA3EAJ #245 Columbia, MD

Date: Tue, 25 Nov 1997 13:52:03 -0800 (PST)
From: doug hauff <slmachco@fix.net>
To: qrp-l@Lehigh.EDU
Subject: [31322] WARNING! NorCal Magnets WARNING!
Message-ID: <199711252152.NAA21160@fletch.fix.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Yo! IF YOU HAMMER OR USE EXCESSIVE FORCE TO SEAT MAGNET IT MAY SHATTER!
WEAR EYE PROTECTION!!!! The magnet material is very hard and brittle, I
have crushed several when cutting them; you may destroy it by hammering!
Better to use a vise, or heat and cold as suggested. I have not used this
method with brass, but for aluminum I put the ID object in the oven (375*),
the other piece in the freezer. If you don't dwaddle, you can slide the
piece in easily, but watch out - it will seat quickly, you basically get one
chance...take a deep breath, let half of it out, say your mantra, and slide
that puppy right up to perfect spot....72 Doug KE6RIE

Date: Tue, 25 Nov 1997 17:01:28 -0500 (EST)
From: "Phillip S. Rutledge" <rut@mcrut.mv.com>
To: qrp-l@Lehigh.EDU
Subject: [31323] Re: Mysterious Jewlers Rouge
Message-ID: <199711252201.RAA15831@mercury.mv.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 12:01 PM 11/25/97 -0800, you wrote:
>Hi All,
> Locating this stuff can be a bit daunting.<

I got mine at the local hardware store. (granted, it's a nice one!) In the
past, I've also gotten it thru the Eastwood Catalog. Not really a problem.

73--Phil (K1HS)

Date: Tue, 25 Nov 1997 16:16:49 -0600
From: Tim Ahrens <tahrens@inetport.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>, rut@mcrut.mv.com
Subject: [31324] Re:SGC SG-2020
Message-ID: <199711252216.QAA24461@admin.inetport.com>

MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: quoted-printable

> Incidentally, this "field" version is being created >mainly for the=
commercial market in Europe. (non-ham >related communications)=20

If this is so, then it oughta/probably have a pretty
stout front end!

Tim W5FN

Date: Tue, 25 Nov 1997 14:06:19 -0700 (MST)
From: bcutter@teal.csn.net (Bob Cutter)
To: mgipe@reliablemeters.com
Cc: qrp-1@Lehigh.EDU
Subject: [31325] Re: NorCal paddle polishing advice
Message-ID: <199711252106.0AA19998@ns-1.csn.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

The Dremel can do a pretty good "chainsaw" also.

I taped the collett on mine with plastic electrical tape. If you get on the
"wrong" side of the wheel in grinding or buffing it will quickly pull the
piece into the drill chuck.

72, Bob KI0G

>A Dremel tool is a must to avoid the Texas Chain Saw Massacre effect (tm).
>
>And serendipitously, Tripoli and Jeweler's Rouge are available from Dremel.

Date: Tue, 25 Nov 1997 14:37:46 -0800
From: Jeff Grudin <grudin@pacific.vdbs.com>

To: shurst@magiclink.com
Cc: qrp-l@Lehigh.EDU
Subject: [31326] Re: Mysterious Jewlers Rouge
Message-ID: <347B533A.7BB7@vdbbs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Steve,

I picked up some mag wheel/metal polish at the auto parts store. There is a bunch of them in little round "ointment jars". One, I believe it was "Black Magic", says that it has a fine abrasive that is a jeweler's rouge.

It worked great on mine, was inexpensive, and easy to find.

If you want to see how it works, look at my paddles on the NorCal page notes from the November meeting.

You can see them here

<http://www.fix.net/~jparkner/norcal/novmtg/nov1a.htm>

Good Luck.

--

73 de Jeff AC6KW
grudin@vdbbs.com

QRP-L #16	Private Practice : Companion Animals and
Exotics	
Norcal QRP #1292	Ocean Animal Clinic / Cat Clinic of Santa
Cruz	
	Santa Cruz,
California	

QRP'ers do it with less energy (but lots of enthusiasm)!

Date: Tue, 25 Nov 1997 17:10:08 -0600 (CST)
From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [31327] Low Frequency Radio
Message-ID: <Pine.OSF.3.96.971125170823.28492A-100000@duke.usask.ca>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

A while back I posted a message asking for more information on low frequency radio. Someone else sent me mail asking if I could forward the responses I got to him. I don't remember who it is but hopefully he reads the this group.

Anyway I have included low frequency radio links in my web page. They can be found at

<http://www.usask.ca/~buydens/ham>

Enjoy.

```
+-----+
| Brian Buydens,           Computing Services, University of Saskatchewan |
| email: Brian.Buydens@usask.ca           http://duke.usask.ca/~buydens |
| VE5RDV                                     |
|                                           |
| DO NOT ADD ME TO ANY MAILING LISTS WITHOUT MY CONSENT !!!           |
+-----+
| De beste schippers staan aan wal!                                     |
+-----+
```

Date: Wed, 26 Nov 1997 00:57:27 +0200 (EET)
From: "Arjen Raateland, FEI/Impacts Research" <Arjen.Raateland@vyh.fi>
To: qrp-l@Lehigh.EDU
Subject: [31328] 2SC1947
Message-ID: <01IQG3Y09WRS8Y7ANP@vyh21.vyh.fi>
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII
Content-transfer-encoding: 7BIT

Hi folks,

I bought some (expensive) 2SC1947 transistors that were said to be equivalents of the MRF237, but with the normal pin-out. However data from one particular source would indicate it's maximum RF power output isn't very high, just 1 W.

Does anybody on the list have a data sheet or otherwise reliable data on the 2SC1947? Was it too good to be true, an MRF237 with normal pin-out?

I thought of replacing the 2N3553 in my Sierra and changing the output

choke into a 1:2 transformer as well. But only after I complete the SA/SA Mark II by Steven Weber, so I can see what's happening

cheerio,

Arjen Raateland

--... ..
Finnish Environment Institute, Helsinki, Finland
SAS Support

EMAIL: Arjen.Raateland@vyh.fi

tel. +358 9 4030 0457

fax +358 9 4030 0490

..-.. -.-

Date: Tue, 25 Nov 1997 17:44:08 -0500
From: "Jim Kortge, K8IQY" <jokortge@mci2000.com>
To: qrp-l@Lehigh.EDU
Subject: [31329] South Africa on 17M
Message-ID: <3.0.1.16.19971125174408.2b875970@mail49.mci2000.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii

Gang....Roy, ZS6QU was on 17 meters this afternoon around 1930Z. Had a nice chat with him using the 17S @ 1.5 watts. He was amazed at the signal from the little rig! 539 there; 579 here with his 100 watts.

Listen for him tomorrow, if the band opens up again. Was on vacation today, so got to play radio when I'm usually working.

72.....Jim

Jim Kortge, K8IQY (ex NU8N)		NorCal, QRP-L
jokortge@mci2000.com		__o H.F. bicycle mobile
Fenton, MI		_`\<, Mizuho 17/40 SSB
...	..	.. (*)/(*) ..
NorCal 38S/30 Log	-	34 States; 40 Countries - Running 3 watts
Most recent -	Iowa	Mauritius
NorCal 38S/17 Log	-	18 States; 32 Countries - Running 1.5 watts
Most recent -	New Mexico	S. Africa

Date: Tue, 25 Nov 1997 15:41:52 -0700
From: Brad Mugleston <bmug@gwl.com>
To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>
Subject: [31327] The Exam
Message-ID: <01BCF9B8.A867B9C0@pps-pc10.gwl.com>
Content-Type: text

I just couldn't resist. I know this has nothing to do with anything but It was too good to keep quite.

De KBØROL, Brad

A thermodynamics professor had written a take-home exam for his graduate students. It had one question:

Is hell exothermic or endothermic? Support your answer with proof.

[For Non-science majors, exothermic is when something releases heat and endothermic is when something generates heat.]

Most of the students wrote proofs of their beliefs using Boyle's Law or some variant. One student wrote the following:

"First, we postulate that if souls exist, they must have some mass:

$$E = mc^2$$

When a person dies, their soul departs the body, and the "life force," or E, is converted to some mass, the magnitude of which is not critical to the postulate, and is represented by a constant, k, which may be dropped in subsequent equations. If they do, then a mole of souls can also have a mass:

$$f(m) = E/c^2 = km$$

So, at what relative rate are souls moving into hell and at what rate are souls leaving?" Based on all known postulates of the nature and purpose of Hell, we can safely assume that once a soul gets to Hell, it will not leave. Therefore, no souls leave. As for souls entering hell, let's look at the different religions that exist in the world today.

All religions which incorporate the concept of Hell postulate that if you are not a faithful member of their religion, you will likely go to hell.

Since there are more than one of these religions and people normally do not belong to more than one religion, we can postulate that most people and thus most souls go to hell. With birth and death (and crime) rates as they are, we can expect the number of souls in hell to have increased exponentially some time shortly after the turn of the 20th century.

Now, we look at the rate of change in volume in hell. Boyle's Law states that in order for the temperature and pressure in Hell to stay the same, the ratio of the mass of souls and volume needs to stay constant.

#1 So, if hell is expanding at a slower rate than the rate at which souls enter hell, then the temperature and pressure in hell will increase until all hell breaks loose.

#2 Of course, if hell is expanding at a rate faster than the increase of souls in hell, then the temperature and pressure will drop until hell freezes over.

Statistically, irrespective of the rate at which these occur, they are mutually exclusive, and proving the null hypothesis for one will guarantee exclusion from the null for the other.

So which is it? If we accept the postulate given me by Jennifer Smith during Freshman year, and take into account the fact that I still have not succeeded in knowing her in a biblical sense, then #2 cannot be true, therefor #1 must be true, and hell is exothermic."

The student got an A.

End of QRP-L Digest 920

